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Integration in the State-supported Colleges and Universities of the South

Education and Ethics

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JOURNAL OF HIGHER EDUCATION Vol. XXXII No. 5 May, 1961

Integration in the State-supported Colleges and Universities of the South

The Extent of Progress

By Ernest M. Collins

Of the problems confronting the nation, few have generated so much controversy and discussion as the issue of segregation in public education. This has been particularly true since 1954, at which time the Supreme Court announced its decision that segregated schools were "inherently unequal" and a violation of the Fourteenth Amendment. Although the legal aspects of segregation in education were clearly stated by the Court in its 1954 decision, the problem remains unsolved in many school districts and colleges throughout the nation. In the South, where integration in education is opposed by the majority, the state and national governments are faced with the problem of reconciling the rights of a minority with the concept of "government by the consent of the governed."

The great majority of the books and articles on segregation in education in the South have dealt almost exclusively with the problem at the elementary- and high-school levels. This approach is understandable because of the number of students involved at these levels in comparison with the number in higher education. However, as the number of integrated high schools increases, the colleges will be confronted with a greater number of Negroes seeking admission.

Ernest M. Collins *is an associate professor in the Department of Government at Ohio University.*

Prior to the decision of the Supreme Court, May 31, 1955, which imposed a legal obligation on the states to act "with all deliberate speed" in admitting students to the public schools on a non-discriminatory basis, practically all of the Negro college students in the South attended segregated institutions. Shortly after the Second World War, the Supreme Court rendered decisions in several cases concerning segregated facilities for Negro students.[1] The tone and substance of these decisions made it evident that the states would have real difficulty in convincing the High Court that colleges available for Negroes were equal to those for white students. In anticipation of renewed efforts of Negro leaders to promote integration of the colleges, Southern white leaders made substantial progress in the period between 1945 and 1954 in improving the educational facilities for Negroes. However, the question presented to the Supreme Court in 1954 was not whether the tangible educational facilities for Negroes were equal to those provided for the whites, but the more important question of whether segregation was a violation of the Constitution.

When the Supreme Court, in a unanimous decision, May 17, 1954, ruled that segregated public educational facilities were inherently unequal and a violation of the Fourteenth Amendment,[2] the Southern states were confronted with a legal obligation to integrate their public schools, including colleges and universities. In announcing its decision on segregation, the Supreme Court did not specify when publicly supported schools were to be integrated. This question was answered by the Court, May 31, 1955, at which time it declared that the states must "make a prompt and reasonable start" toward integration.[3]

The decision of the Supreme Court in so far as it applied to higher education elicited a variety of responses from the South. In the border states and the middle South, slow but steady progress is being made in the direction of integration. In the deep South, with the exception of Louisiana, little or no progress has been made toward desegregation. An accurate and complete picture of the extent of integration in the public institutions of higher education in the South is difficult to obtain because of the reluctance of some university officials to disclose registration records. The problem is further complicated because some institutions do not indicate whether the students enrolled are Negro or white.

IN TWELVE of the Southern and border states, desegregation at the college level was initiated prior to the 1954 decision of the Supreme Court.[4] In most instances, it started in the graduate and professional colleges. The decision of state-supported colleges and universities to

[1]Albert P. Blaustein and Clarence C. Ferguson, Jr., *Desegregation and the Law* (New Brunswick, New Jersey: Rutgers University Press, 1957), p. 278.
[2]*Brown* v. *Board of Education of Topeka*, 347 U. S. 483 (1954).
[3]*Ibid.*, 349 U. S. 294 (1955).
[4]*Southern School News* (Nashville), VI (December, 1959), p. 1.

admit Negro students resulted, in most cases, from orders of the federal courts to admit these applicants or construct educational facilities for Negroes equivalent to those offered white students. When confronted with court orders to admit Negro students to law schools, medical colleges, and graduate schools, the Southern states, as a matter of economic necessity, complied with the mandates of the federal courts.

TABLE I

THE STATUS OF INTEGRATION IN PUBLIC INSTITUTIONS OF HIGHER EDUCATION IN THE SOUTH, 1960*

STATE	INSTITUTION	NEGRO ENROLLMENT	TOTAL ENROLLMENT
(1)	(2)	(3)	(4)
Alabama		None (unintegrated)	
Arkansas	University of Arkansas	30	5,945†
Florida	University of Florida	1	11,130
Georgia		None (unintegrated)	
Kentucky	University of Kentucky	80	10,157
	Eastern Kentucky State College	15	3,493
Louisiana	University of Southwestern Louisiana	205	4,910
	Louisiana State University,		
	Baton Rouge campus	59	10,528
	New Orleans branch	229	2,291
North Carolina	University of North Carolina	35	8,592
	North Carolina State Teachers College	20	6,510
South Carolina		None (unintegrated)	
Tennessee	University of Tennessee (and its branches)	40	16,050
	Memphis State University	26	5,275
Texas	University of Texas	150	19,400
	North Texas State College	238	7,491
Virginia	University of Virginia	24	12,921†
	Medical College of Virginia	20	1,249†
Total		1,172	125,942

*_Southern School News_, VII (November, 1960), pp. 1, 8, 9, 10.
†U. S. Department of Health, Education, and Welfare, Office of Education, November, 1959. The figures are for 1959–60.

Desegregation was extended slowly to the undergraduate level in 1954 and 1955. A recent survey of *Southern School News* shows that 116 of 199 of the predominantly white state-supported colleges were desegregated, and that 14 of the 38 predominantly Negro colleges were desegregated.[5] An examination of the available registration figures of Southern colleges and universities reveals, however, that with rare exceptions, only a few Negroes are enrolled in previously all-white colleges.

The University of Louisville was the first publicly supported university in the South to enroll undergraduate Negro students. In 1950, Louisville Municipal College for Negroes was merged with the University of Louisville, thereby effecting a substantial saving in annual expendi-

[5]VII (November, 1960), p. 1.

tures. Since the registration records do not reveal enrollment according to race, the exact number of Negroes in attendance is difficult to ascertain, but it is generally known that several hundred are enrolled.

An example of integration in reverse is West Virginia State College, which prior to 1954 was an all-Negro institution. White students now constitute approximately 65 per cent of the total enrollment, but the faculty remains predominantly Negro. Some of the factors responsible for the increase in the number of white students at West Virginia State College are its location in the heavily populated area in and around Charleston, the low tuition fees it charges, and the absence of other state-supported colleges in the immediate vicinity.

In Arkansas, Florida, Louisiana, North Carolina, and Virginia, only 814 Negroes are enrolled in state-supported colleges: 634 of these are enrolled in Louisiana.[6] It is apparent that integration at the college level in Louisiana has met with less opposition than it has at the elementary level. Efforts to enroll four Negroes in the first grade in New Orleans public schools, November 14, 1960, caused a great protest by parents, white students, and members of the Legislature.

The 1960 enrollment of Negroes in fourteen of the major state colleges and universities in the South, as shown in Table I, was 1,172, as compared with a total enrollment of 125,942 students. The overwhelming majority of Negro students in the South are attending all-Negro colleges.

In Alabama, Georgia, Mississippi, and South Carolina, there has been no integration in state-supported education at the elementary-, high-school, or college level. In 1956 the University of Alabama enrolled Autherine Lucy, Negro student, but she was expelled shortly thereafter because of the nature of her remarks regarding the University. The action of the University was upheld by the federal district court in Birmingham. Even though the University is under a court order to accept qualified Negro applicants, none are presently enrolled.

To discourage Negro applicants to the colleges in Georgia, the Board of Regents for the universities of that state adopted a rule which required all applicants to have the approval of two alumni. Because of the unreasonableness and discriminatory intent of this rule, it was eliminated as a condition of admittance. Even though the regulation has been declared null and void by a federal district court, Georgia's state-supported colleges remain segregated.

Mississippi's Board of Trustees for the state institutions of higher learning has devised rules to prevent Negro admission to state-supported colleges. This has been done by a requirement that all applicants for entrance into any state college must have their petitions approved by five alumni of the college to which they are seeking admission. Since there are no Negro alumni of white state-supported colleges in Mississippi, the chances that Negro applicants can meet the state's admission requirements are almost nonexistent.

[6] *Ibid.*, pp. 8, 9, 10.

The experience of Clennon King, a former Negro professor at Alcorn Agricultural and Mechanical College in Mississippi, has discouraged Negro students from applying for college admission. After being released from his position at Alcorn, King applied for admission to the University of Mississippi. Upon arrival he was taken from the campus by state-highway patrolmen, and, on the order of a county court, placed in the state mental institution at Whitfield for observation. He was later released, and left the state to reside in California.[7]

In South Carolina all publicly supported colleges and universities are required by state law to be segregated. With one exception, the private colleges have also adhered to a policy of segregation. In 1957–58, Andre Toth, a white Hungarian refugee, enrolled in Allen University, which is a Negro church-financed institution. According to school officials, Toth was well received by the students and faculty, and his academic record was good during his one-year stay.

There is some controversy as to whether the admission of Toth was responsible for the action of the South Carolina Board of Education in removing Allen University from the approved list of teacher-training institutions. The Governor maintained that the action was taken because there were three "communist-linked" persons on the faculty.[8] The faculty members involved in the controversy are no longer at the University, and the teacher-training program has been restored to the approved list.

An analysis of the actions taken by the state officials who control the public colleges and universities in the lower and deep South makes it apparent that they have planned their legal defenses in depth and in great detail. By confronting the potential Negro college students with expensive and time-consuming litigation, the pro-segregation advocates hope to discourage them from seeking admission to predominantly white colleges, and thereby to gain time in which to adjust their ideas on the issue of integration.

On the basis of statistics alone, the pace of integration in higher education in the South appears to be slow. However, the extent of progress cannot be judged solely on this basis, because statistics do not fully reveal the degree to which the South has changed its ideas about Negro rights and how far it has traveled in the direction of accepting educational equality for the Negro.

MOST of the accounts relating to segregation in the public colleges and universities of the South have dealt almost exclusively with ideas and persons opposed to integration. A fair and balanced appraisal of this problem should include some comment on the factors which have been helpful to integration. Some of the groups in the South which have had a beneficial effect on integration are the business leaders, the moderates, and the church leaders. Industrialization of the South,

[7] *Ibid.*, VI (December, 1959), p. 12.
[8] *Ibid.*, p. 13.

increased participation of Negroes in elections, and concern regarding the effect of the treatment accorded Negroes in the United States on American prestige in the new countries of Africa and Asia are all factors which have exerted a favorable influence on integration.

Southern moderates resent the fallacious assumption that the North has a monopoly on the idea of justice and equality for minority groups. To be a moderate on the issue of integration, where the dominant attitude of the whites varies from reluctant acceptance to overt acts of violence, requires courage and determination of a high order. No unusual courage is required to be a liberal on problems that are remote.

The ideas of Southern moderates have had a wholesome influence on those who have proposed bi-racial schools regardless of the consequences, as well as on those who have manifested little or no concern for the educational welfare of Negroes. The primary role of the moderates is to create an image of the Negro as a citizen. In view of custom and tradition in the South, this is an exceedingly difficult and unpopular task. Until the Negro is accepted as a citizen, however, progress toward bi-racial colleges will be slow.

The stand taken by some of the Southern church leaders has contributed significantly to the progress of desegregation in the public educational institutions. Since the 1954 Supreme Court decision, many searching questions have been raised by churchmen in their concern about the apparent contradictions between the concept of the equality of men in the sight of God and the inequality of educational opportunities. Churchmen have found it difficult to reconcile the obligation to "love thy neighbor" with the outward manifestations of hostility and indifference to the educational welfare of Negroes. Negro ministers have been particularly active in providing leadership and initiative in working with white persons on problems of segregation and in making arrangements with Negro attorneys to present segregation controversies to the courts.

Southern businessmen have manifested their concern about the effects of school integration on the rate of industrial expansion in the South. The development of new industries in this region during and since the Second World War has substantially improved the economic status of the people. The tension and disorder resulting from the controversies over mixed schools have had a detrimental effect on business expansion. Southern businessmen, motivated by a combination of self-interest and civic pride, have used their prestige and influence to reduce the friction arising from the problem of integration.

A conflict exists between the social and the economic interests of the Southerner. His social customs do not permit integration in education; yet the controversy which may result from his opposition to integration is harmful to his economic interest. In an effort to resolve his conflict of interests, he will be influenced in his hostility to integration by his

desire to improve his standard of living. An increase in the number of contacts between the people of the South and other areas, as a result of industrial expansion, will tend to dilute Southern traditions, promote cultural diversity, and thereby create a more favorable climate for integration at the college level.

The failure of Negroes to participate in elections—whether as the result of their own indifference or of legal obstructions imposed by state officials—has severely limited their bargaining power to obtain services and programs which they desire. Through increased participation in elections and political activity, the Negroes will greatly improve their opportunities to obtain a college education in integrated institutions.

As a part of the philosophy of the American system of government, the doctrine that "all men are created equal" has made a great appeal to oppressed peoples throughout the world. Those conversant with the problems of American foreign policy in Asia and Africa are keenly aware of the relation between American prestige abroad and the treatment accorded Negro citizens at home. Pious declarations about freedom and equality are meaningless in the face of acts of oppression and injustice. In its role as a leader of the free world, the United States is becoming increasingly concerned about injustices to minority groups which may be publicized to its discredit in international diplomacy. The concern of the nation's diplomats about minority rights, whether motivated by diplomatic expediency or pure humanitarianism, has been beneficial to the Negro in his efforts to promote integration.

THE 1955 decision that public education must be integrated "with all deliberate speed" has resulted in a variety of interpretations and responses. In the border states and the District of Columbia, the court's ruling has been interpreted to mean immediate action; in the middle South, "make haste slowly"; but in the deep South, it has led to a renewal of determination to prevent integration.

The majority of Southern whites are not psychologically ready to accept bi-racial schools. They want time to evaluate the probable consequences of integration and to adjust and reorient their thinking. In the opinion of Senator J. W. Fulbright of Arkansas, the problem of school integration "is more likely to yield to the slow conversion of the human heart than to remedies of a more urgent nature." In order to gain time, some of the Southern leaders will contest in the state and federal courts every effort to integrate the publicly supported schools and colleges. The slow pace with which the South is desegregating its schools is most disappointing to the Negroes.

In the controversy over bi-racial schools and colleges, the Southern whites are confronted with the unpleasant decision of whether to attend mixed schools and thus violate their social customs or to oppose integration and thereby defy the supreme law of the land. Faced with the

alternative of desegregation or closing the public schools and colleges, the majority will accept token integration. The pattern emerging in the middle South indicates that for many years there will be only token integration. Changes in attitudes and behavior toward the Negro will come slowly. This is borne out by the fact that although the Fifteenth Amendment has been a part of the Constitution since 1870, the right of the Negroes to vote in Mississippi is far from fulfillment. Although the number of Negroes enrolled in integrated institutions of higher learning in the South is small, it is evident that there is less opposition to desegregation at this level than at the elementary-school and high-school levels.

The 1954 decision of the Supreme Court on segregation in public education is not the final chapter on Negro rights, but it is another step in the direction of equality. A final solution will require a greater willingness on the part of the white citizens to re-evaluate the meaning of "equal protection of the laws" and a more conscientious effort to accept the Negro as a full-fledged citizen. Responsible behavior on the part of Negroes and courage and sound judgment on the part of their leaders will contribute significantly to narrowing the gap between their legal rights and those actually allowed.

Education and Ethics

The Effect of Organized Sports on the Moral Tone of the Nation

By JOHN R. TUNIS

PLEASE be advised that this is not really an article on intercollegiate athletics. As the Professor of Law at the University of Michigan remarked, in effect, anyone with an urge to write on this topic should drop dead.[1] This is an article on a serious subject. My topic is ethics. Ethics is, as you know, the science of morals. I am competent to discuss this subject for several reasons. Once, long ago, I took a course in ethics at the institution which our president in one of his less grim moments called "the Southern California of the East." This course in ethics was given by a world-famous authority whose name was even whispered at Oxford and Cambridge. A tiny bit of it must have hit home, because several years later I joined the Fellowship of Educated Men with a fine, 20-karat system of moral principles. Being young and quick to learn in those days, it soon struck me that I was making painfully little progress toward becoming Junior Citizen of the Year. Not having married a rich wife, it became necessary for me to make a choice. Consequently, before long I abandoned moral principles and ethics in favor of money. Shortly after, the money came rolling in.

So nowadays instead of telling the Seniors at the local high school that They Stand upon the Threshold of Life, for once in a way I come clean. Instead of advising them to adopt a system of fine moral principles guaranteed to keep from freezing in a temperature of 24 degrees below zero, I admit that ethics is hardly consonant with what we like to call the American Way of Life, which includes, among other oddities, the Oath of Allegiance on every possible occasion, the Salute to the Flag every morning at 8:15, "The Star-Spangled Banner" whenever we play a football game or open up a new shoeshine parlor. Ethics, I explain with care to the Seniors, will get you nowhere except insolvency. It got Willard Uphaus of New Haven, a really good man, one year in the Merrimack County Jail in Boscawen, New Hampshire.

[1]Marcus L. Plant, "The Place of Intercollegiate Athletics in Higher Education: Faculty Control," JOURNAL OF HIGHER EDUCATION, XXXII (January, 1961), p. 1.

JOHN R. TUNIS *has been covering sports for over thirty-five years. He is the author of many novels and numerous magazine articles on the subject. As a broadly educated and sensitive observer, he has had an unusual opportunity over the years for first-hand ob- f the impact of athletics on education in this country. This is the es of articles on the place of intercollegiate athletics in higher educati.*

So I advise the boys and girls, when they finally get to be Attorney Smith, General Smith, Mayor Smith, Professor Smith, or President Smith, never to monkey with ethics. Especially if they are going into education. As in other phases of our society, in education the battle is the pay-off. History tells me that ethics has paid off in few battles.

A RECENT instance helping to prove to me that ethics does not pay off concerns the University of Minnesota, an institution which seems never to have suffered severely from the football malady. The faculty has, indeed, several times expressed openly its opposition to such fantasies in the world of sports as bowl games. This past autumn, bad fortune scowled on Minnesota for the first time, and the team was tagged for the Rose Bowl.

A meeting was held, the 168-man Faculty Senate of the University was polled on this subject, and only two members voted no.[2] I suggest that the following inscription be carved in stone on some prominent structure at Minneapolis.

> One hundred and sixty-six members of the Faculty Senate of the University of Minnesota: *Football Is More Important than Education.*
>
> Two unknown members of the Faculty Senate of the University of Minnesota: *Education Is More Important than Football.*

This figure two, by the way, seems to be a magic number. Each member of the Big Ten this winter was eligible for $23,000 from the Pasadena Loot. Last May, the Faculty Council of Ohio State University asked the Athletic Council (whose actions they review) not to accept any moneys from the Rose Bowl. Jack Fullen, alumni secretary, has this to say in the January, 1961, issue of the *Ohio State University Monthly*, the alumni publication:

> The Athletic Council, having hidden the hot potato all summer and fall, finally had to handle it. They came in with a recommendation that Ohio State take the money. . . . The vote: FOR, two alumni, two students, three faculty members; AGAINST, two faculty members.[3]

I have been waiting in vain for some college president to admit openly that intercollegiate football does not help an educational institution either in (a) enrollment, (b) prestige or scholarship, or (c) endowment or sound learning. In fact, quite the opposite. All one gets is platitudes such as those in the recent Conant report.

> . . . I wish to emphasize . . . the importance of the local school board (page 46).
>
> The gymnasium is more important in colder regions . . . than in . . . warm areas . . . (page 31).
>
> Interscholastic athletics and marching bands are to be condemned in junior high schools . . . (page 42).[4]

[2] *New York Times Magazine*, January 1, 1961, sec. 6, p. 15. T. E. Pettengill, clerk of the Senate, informs me that the action of the Senate on the invitation to the Rose Bowl was by voice vote.

[3] "Teacher, What Are Colleges for?," XLII, p. 2.

[4] James B. Conant, *Education in the Junior High School Years* (Princeton, New Jersey: Educational Testing Service, 1960).

No doubt you think I made these up. Not true. After reading the experts, one is forced to the conclusion that education is like war. It is too serious a business to be entrusted to the educators.

I recall hearing as a young man, in the days of Rutherford B. Hayes, of a fictitious character who, badly injured and lying in agony on the ground during a football game, looked up and boldly declared, "I'd die for dear old Rutgers." At President Kennedy's alma mater in my time, it was fashionable to be amused at this peculiar standard of values, and, in fact, to be inclined to look down upon it. Lately I have been thinking that perhaps this naïve youth from Rutgers had something. At any rate, he was vastly superior to the college basketball stars who shaved the point spread for dear old Bradley, dear old Manhattan, and dear old Kentucky, as well as to those doing the same thing today in other colleges and universities throughout these more or less united states. I find the Rutgers lad superior in every way to the football heroes from Minnesota, Ohio State, and other institutions of learning in the land where athletes are bought and paid for at so much per pound, F.O.B. Chicago or Kansas City.

THE purposes of education? They have been defined a million times from the period of Socrates to the present day. Last June the President was awarded an honorary degree at Cambridge. (If I quote Mr. Kennedy *ad nauseam*, it is because having a President who reads books and has never been named Big Brother of the Year is a refreshing novelty.) Mr. Kennedy then defined the purposes of education as "the advancement of knowledge and the pursuit of truth." Why, I often wonder, is this pursuit so frequently concealed from the participants in the search?

What we laughingly call intercollegiate sports has many positive values and an educational side which I would be the last to deny. But in this age, surely the most material period of history since the time of Nero, organized sports have had a part in lowering the general moral tone of the nation, and have helped to corrupt all of us. Particularly, of late years and for several generations, they have assisted in the corruption of the nation's undergraduates in college. Obviously, they observe that the lofty principles they hear espoused in the classroom are denied and derided on the field of sport. "How do you teachers expect young men and women to have standards of value?," I asked a professor of philosophy at the University of Illinois recently. His answer was, as might be expected, a timid confession of failure.

"We hope some of it will stay with them."

But the students know that athletes in college are bought, that they have privileges others do not obtain. They know, as a recent article in a national magazine showed, that an Olympic track star takes about $10,000 a year from amateur sport. A victorious Davis Cup star can expect a $50,000 contract from promoter Jack Kramer. How much a basketball player like Lucas is worth is anyone's guess. Since the students, like everyone else, are aware of the situation in athletics, no wonder they

leave the halls of learning eager for the quick buck, irresponsive to the problems of the nation within and the world outside.

Most universities boast—see these souped-up products of conspicuous consumption called university catalogues—that their students are exposed to athletics of various kinds under competent physical instruction for four years. No doubt this is true. What effect has it had on them? How have the students reacted? What sporting or civilized values did the undergraduates of the University of Georgia have when a defenseless Negro first enrolled there? What kind of sportsmen were Barry McKay, a graduate of the University of Michigan, and Chuck McKinley, from Trinity University in Texas, in Australia last year? As members of our Davis Cup team, they had been taught that the only thing which counted was winning. Consequently, when they lost to the Italian team at Perth in December, 1960, they protested the calls of the linesmen, threw their rackets at the spectators, and acted like boors. The plain fact is that we have been so used to being top dog in sports that whenever we are beaten by the Russians in the Olympic Games or by the Australians in the Davis Cup competition, we consider it an affront. Then we console ourselves by calling our adversaries a bunch of professionals who are supported and paid by the state.

Athletics is the phase of collegiate life that touches undergraduates closely and affects them intimately. When they see that their elders are fakers and trimmers, they assume that this is the road to success. It does not take the young long to learn in school and college that unless you win, you are a failure. For the victor, the juicy contract or the pay-off in any number of ways. For the loser, contempt. Cheating in sports is never condoned when exposed. All adults give lip service to the ideals of sportsmanship. There it ends. The football coach and the athletic director, despite their precarious tenure, are more powerful on campus than anyone else, and have been for years.

These things are obvious to the most turgid undergraduate mind. Worst of all, our system of athletics has corrupted university officials and college presidents, who seem to operate with one eye on education and one eye on the athletic balance sheet. A university, like a foundation, a corporation, or a battery of field artillery, is no better than the man at the top. Perhaps one man alone cannot make an educational institution, although N. M. Butler, A. L. Lowell, and R. M. Hutchins did a great deal along this line. Nevertheless, by looking the other way at the right time, by lack of example, by cowardice at vital moments on vital decisions, one man can make an institution of learning into a football factory.

A PERCEPTIVE observer of the American scene, John Crosby, remarked recently, "It does not take laws or money to practice virtue. It takes training and a habit of mind." Agreed. But is this enough? Doesn't it also take, in education, men who are living examples

of virtue? Doesn't it take an educational system in which quality has not been sacrificed to quantity, and educators who would rather teach in a classroom in a district school than betray their principles? These men, these leaders indoctrinated with virtue, exist. Unfortunately, they are hard to find.

A sign on the corner of Fifth Avenue and Forty-second Street claims that "a family which prays together stays together." This slogan, which seems to me Madison Avenue at its most odious, may perhaps be sound, although it needs more than a billboard sign to convince me of its validity. However, we are today the most prayed-over nation on earth, as the last Inauguration ceremonies showed, when everyone save a witch doctor from the Hopi Indians got into the act. Were we, I wonder, not better off morally years ago, when fewer folks crowded the churches but the zeal for the quick buck had not as yet corrupted the nation?

In considerable wordage—space in this review being less tight than in its competitors *Life*, *Look*, *Pick*, *Click*, *Wink*, and other dispensers of culture to our civilization—I have been attempting to say one thing. Perhaps ethics is important to a nation. Possibly college sports as practiced today are unethical. Their values may be harmful ones. Athletics, as we know it, practice it, and condone it, has for years had a deleterious effect on our mores and on our young people. It has assisted in breeding a race of chiselers. It has profoundly affected our morals, mostly for the worse, by proving to everyone that if you get away with it and win, nothing else really matters.

Now, as *Herr Doktor* Mort Sahl says, Is there anyone I haven't insulted? If so, I most sincerely apologize.

Big Ten Harmony: Academic Style

A Report on the C.I.C.

By Boyd R. Keenan

FACULTY eruptions over athletic policies in general and Rose Bowl commitments in particular have ironically overshadowed recent academic harmony among those large Midwestern universities known collectively as the Big Ten.[1] The well-publicized faculty–athletic board conflicts which still threaten the existence of the long-mighty Western Conference (the formal name of the athletic framework) have been paralleled by quiet but meaningful progress in scholarly co-operation. The subdued tone of the inter-institutional development has been intentional. Athletic problems, as well as less spectacular rivalries in other areas, warned against early expressions of institutional pride in joint efforts. But the third year of academic co-operation has just been completed, and programs are now under way that three years ago would probably have appeared fanciful to the Big Ten executives themselves.

Oddly enough, one must return to the Big Ten athletic conference for the full story of the co-operative venture. Presidents of the ten universities organized themselves several years ago as the Council of Ten, and since then have met at least twice annually to discuss a great variety of problems of common concern, many far beyond the realm of athletics. In December of 1957, this quasi-official body adopted a resolution setting up a special committee composed of a top academic representative from each of the ten institutions to develop basic plans leading to inter-institutional co-operation.

An invitation to the University of Chicago to place a representative on the committee was accepted in 1958. The formal name of the body then became the Committee on Institutional Cooperation of the Council of Ten and the University of Chicago (C.I.C.). Later in the same year, the Committee requested support from the Carnegie Corporation of New York, and $294,000 for a five-year period was forthcoming in two separate grants.

[1]The Big Ten institutions are the University of Illinois, Indiana University, the State University of Iowa, the University of Michigan, Michigan State University, the University of Minnesota, Northwestern University, Ohio State University, Purdue University, and the University of Wisconsin.

Boyd R. Keenan *is an assistant professor of political science at Marshall University.*

The 1957 decision of the Big Ten presidents represented a new approach within the broad regional movement which began in the South in 1948 with the establishment of the Southern Regional Education Board. The Southern board, and the newer Western Interstate Commission for Higher Education and New England Board of Higher Education, have been formed through interstate compacts ratified by the various state legislatures. These three agencies together embrace a total of thirty-five states, leaving only twelve Midwestern states, in addition to New York, New Jersey, and Pennsylvania, that are not taking part in "legal" co-operation in higher education.

THE Big Ten move to initiate voluntary co-operation has been construed by some Midwestern observers as an effort to discourage consideration of the establishment of formal regional programs through interstate compact. Regardless of the validity of this claim, it is true that Midwestern legislators have given some attention to the possibility of an interstate compact through which their states might reduce total regional expenditures for higher education. And an awareness of this attention is necessary for an understanding of the Big Ten endeavor.

Word from the South of the successful programs of the Southern Regional Education Board alerted Midwestern legislators to the compact possibilities early in the fifties. The Council of State Governments, a co-operative agency formed by the various states, provided the arena for discussion of a compact in its annual Midwestern regional conference. A resolution urging the exploration of proposals for an interstate compact in higher education was adopted by the 1954 Midwestern Regional Conference.

The next step taken by the Council of State Governments and leading state legislators was the appointment of a planning group on regional co-operation in higher education. Representing the twelve states in the Midwest, this temporary committee conducted its studies under the chairmanship of J. L. Morrill, then president of the University of Minnesota. In 1955, the committee reported that an interstate compact establishing a regional board was neither essential nor desirable in the Midwest. This conclusion was based chiefly on the fact that complex universities with professional schools existed in most Midwestern states. This situation contrasted with the conditions in those regions where compacts had been successfully utilized.

However, the temporary committee did recommend that a permanent interstate committee on higher education be created. Such a committee was immediately appointed in 1955 by the Council of State Governments, and has been functioning on a limited basis without a staff since then. Membership on the committee, formally known as the Midwestern Interstate Committee on Higher Education, is held by the university presidents and a legislator or state official from each State Commission on Interstate Co-operation within the twelve-state region. No formal

relations exist between this committee and the Big Ten co-operative group, although presidents of public universities within the Big Ten are actually members of both the Council of Ten and the Midwestern Interstate Committee on Higher Education.

Practically speaking, it appears that the bond among the Big Ten university presidents—serving institutions in seven states—is much stronger than that among presidents within the twelve-state framework. And it is significant, perhaps, that the Big Ten institutions are experimenting in academic co-operation through the C.I.C. arrangement without the direct aid—or the interference—of legislators and other political leaders.

Even if the action by the Big Ten presidents in 1957 was not aimed directly at state legislators impressed by stories of the success of regionalism, these legislators can hardly overlook the possibilities of the voluntary venture. Seven of the largest Midwestern states unaffiliated with the formal regional agencies are embraced by the C.I.C. plan. Most Big Ten administrators remain convinced that a voluntary system of co-operation functioning in these seven states would be superior to a legislatively mandated arrangement. And if the voluntary plan is moderately successful, it seems unlikely that legislators will seek formal co-operation through an interstate compact. The inclusion of two private institutions (Northwestern University and the University of Chicago) in the C.I.C. organization may be a source of concern to some Midwestern legislators. Yet private universities in the South, the West, and New England have played vital roles in the development of "legal" regional co-operation.

ALTHOUGH the desire to foster inter-institutional co-operation represented the chief impetus in the forming of the Committee, one other factor should not be overlooked. It is no secret that Midwestern educational executives and teachers alike sometimes resent complacent innuendos from Ivy League spokesmen implying that the Big Ten universities are in effect degree-mills excelling chiefly in athletic pursuits. Not a few Big Ten representatives have welcomed the C.I.C. as the logical platform from which the world may be informed that something worth while exists in American higher education between Cambridge and Berkeley.

Several of the vice-presidents and provosts appointed to the Committee are themselves products of the Ivy League, and have some basis for comparing the two "leagues." The easy generalization that "fun and football" are uniquely characteristic of Big Ten institutions naturally rankles in the minds of these executives. The condescension of the "quality" Eastern schools becomes even harder to bear when the Big Ten schools from time to time feel the effects of raids from the East on their faculties. The Committee itself has suffered the loss of two of its eleven original members to the East. When the state of New York needed a president to head its huge university system in 1959, it lured

Tom Hamilton from his Michigan State vice-presidency and his seat on the Committee on Institutional Cooperation. In the summer of 1960, Gordon N. Ray, provost and vice-president of the University of Illinois, gave up his institutional post and the chairmanship of the C.I.C. to become associate secretary-general of the John Simon Guggenheim Memorial Foundation.

In 1958, after the University of Chicago placed its representative on the Committee and the first of the Carnegie grants was received, the search began for an educator to direct staff operations. Since long-standing feuds among these schools have not been limited entirely to athletics, the Committee felt the need of an elder statesman with top-level administrative experience and knowledge of Big Ten infighting. Such an individual, it was agreed, could best hold the reins tightly during the formative period before the venture gained momentum.

A natural for this assignment was Henning Larsen, then seventy, provost emeritus and professor of English at the University of Illinois. An outspoken liberal who joined the Illinois English faculty in 1939 after several years of service at the State University of Iowa, Larsen is known within the Big Ten framework as a professor's type of administrator who reluctantly became an academic bureaucrat late in his career. After a three-year stint as head of the Illinois Department of English, he became dean of the College of Liberal Arts and Sciences in 1947. Larsen is still identified by many University of Illinois faculty members as the chief single force which kept that institution from suffering irreparable damage in 1953 when trustees fired President George D. Stoddard in an unprecedented midnight session. Stoddard was dismissed in a surprise move led by the most famous member of the board of trustees, former gridiron hero Harold (Red) Grange.

Mindful of Larsen's reputation in the Midwest as a faculty champion, the Committee of academic leaders asked him to become their first C.I.C. staff director soon after he retired as provost at Illinois. Refusing the offer initially, Larsen accepted the directorship later when the Committee assured him that they only wanted his steady hands to hold Committee energies in check for the first few months.

For twenty-one months Larsen visited the campuses and studied the universities' curriculums to locate problems worthy of the attention of the Committee. His chief aim was to discover areas in which co-operation among Big Ten universities and the University of Chicago might strengthen their work and increase their effectiveness. A secondary objective was to improve the Committee's understanding of the impact of the eleven universities upon the life and culture of the Midwest and the nation.

In the spring of 1960, Larsen urged the Committee to find a younger man to whom he could give the reins of an agency definitely on the move. After a nation-wide search for an educator to step into the directorship, the Committee returned to the Midwest and selected John Hicks, an

economist and assistant to the president at Purdue University. Hicks accepted the appointment on a part-time basis but retains his responsibilities at Purdue. He has chosen the designation "acting director" for himself and has handed the full-time operational duties to Stanley Salwak, associate director, on leave from his post as assistant to the provost at the University of Massachusetts. Central staff headquarters were moved from Urbana, Illinois, to the Purdue campus, Lafayette, Indiana, in August.

REGARDLESS of the future of the Big Ten athletically, academic co-operation is now an established fact. Partly by accident and partly by intent, the institutional pattern first drawn by athletic relationships has now evolved to the point where scholarly co-operation is in no way dependent upon the sports image. This is not to say, of course, that the top academic officers of all eleven institutions are equally enthusiastic over future prospects of the venture.

Aspirations for the future of the C.I.C. among top-level administrators range from doubtful hope to sturdy faith in the regional project. Committee members themselves have experienced despairing moments during their two-day quarterly meetings. Professors who become depressed with the hopelessness of departmental and college faculty meetings can well understand the frustrations facing representatives of eleven independent, powerful universities in their attempts to locate and implement co-operative possibilities. After a particularly grueling quarterly session, one member put his doubts in rather strong words: "I sometimes wonder if our universities actually aren't involved in this project to find out how they may better compete rather than co-operate."

Such despair has not been lasting. The Committee members view their accomplishments as pioneering efforts in a movement that may have national significance. And most of the academicians are becoming convinced that certain departments tucked away in each of their sprawling universities rank second to none in the nation, if not the whole world.

But what are the concrete possibilities? The Carnegie Corporation of New York has expressed willingness to provide further support for the venture after the present five-year grants expire, but the foundation will expect expressions of faith from the institutions in the form of financial contributions. No institutional commitments have been made.

Delicate inter-institutional relationships have caused C.I.C. spokesmen to be hesitant in releasing information on co-operative programs being undertaken. From the beginning, the Committee has been concerned lest isolated cases of successful co-operation be exaggerated in the public mind. However, activities of recent months indicate that hopes are rising within the Big Ten that the project will continue indefinitely.

In July of 1960, the Committee established a joint University Facilities Research Center through a new $50,000 grant from the Educational

Facilities Laboratory, Inc., of New York City, a non-profit corporation established by the Ford Foundation. The chief functions of the research center are to serve as a clearinghouse for information about educational facilities among the eleven institutions, to serve as a central repository for materials on educational facilities gathered from national sources, and to conduct research on matters of common interest and make findings available to other educational institutions. The grant will cover operations for only one year, but at the end of that period both the Committee and the granting agency will review the activities of the center and consider continuation of the project.

ONE of the most dramatic pieces of evidence of a new spirit of co-operation in the Big Ten is joint planning for a broad graduate-training program in bioclimatology. (Bioclimatology is that branch of ecology which investigates the effects of atmospheric-environment organisms. Since the Second World War, there has been a steady growth of attention to this area of biological science.) Most exciting to the Committee is the fact that experts from several disciplines—physiologists, engineers, refrigeration specialists, meteorologists, and agriculturists—want to participate in the program of their own choice rather than as a result of administrative prodding. The Committee is only the catalyst and clearinghouse for this and other projects; programs are developed by faculty members themselves without interference from the Committee.

The driving force behind co-operation in bioclimatology is Frederick Sargent II, a professor of physiology at the University of Illinois. "Strangely, programs for training young scientists in fundamental concepts and principles of methods of bioclimatology have not gone hand in hand with growth of research," Dr. Sargent has told the C.I.C. "Students must learn to think integratively about complex organismic-environmental interrelationships."

Dr. Sargent has convinced the academic chiefs that the Big Ten institutions together offer the ideal arena for such integrative thinking. They agree with him that a joint program of graduate training in animal and human bioclimatology should utilize to the maximum available research facilities and personnel within the Big Ten. Bioclimatology is interdisciplinary, and no one university is necessarily strong in all contributing sciences or branches of bioclimatological work. The Committee is confident that this proposal is ready-made to prove that the schools can pool their resources and achieve the most integrated program of graduate study of its kind.

The specialties of the various universities dovetail in this area almost as if the co-operative plan had been envisaged for years. Graduate training in human bioclimatology at Illinois has been a co-operative project between the departments of geography and physiology from the start. A joint program on that campus has been attracting graduate

students from zoology, animal sciences, physical education, veterinary medicine, psychology, and biological sciences, in addition to physiology and geography. Young people in Illinois are being trained specifically in such areas as human-environmental physiology, medical meteorology, and medical geography.

At the State University of Iowa, graduate work is offered in environmental physiology. At the University of Michigan, there is a co-operative research program under way between meteorologists and physicians, who are studying the effects of weather on hay fever and asthma.

Purdue engineers and agricultural experts are utilizing climatic chambers for investigating the influences of the physical environment on domestic animals. Wisconsin is currently constructing a biotron for controlled investigations in genetics and in other areas. Environmental research is also under way at Indiana and Ohio State; work at the latter institution includes efforts to determine the psychiatric effects of weather.

Field training in human bioclimatology and medical geography is expected to develop after the co-operative program is established. It is hoped that summer field training may be undertaken in Puerto Rico, the West Indies, or Panama. The Big Ten scientists also envisage research on protein malnutrition, a disease which exhibits geographical patterns. At present, the bioclimatologists are preparing a proposal for a grant from the National Institutes of Health.

Committee support provided for C.I.C. geography-department heads has resulted in plans for a joint field course during the 1961 summer session. Departments of landscape architecture are also planning joint action.

AMONG other efforts initiated through C.I.C. support and encouragement are co-operative studies in nursing education, a pilot study in medical education, a survey of problems facing pharmacy colleges, an examination of possible co-operation in the administration of educational research, and an investigation by deans of education of co-operative possibilities in the training of teachers.

A host of other proposals have been discussed by the Committee during the past year. Still being explored are co-operation in nuclear engineering and the establishment of a radio network by the C.I.C. institutions. The complexity of relationships between large universities and the federal government has prompted a preliminary investigation of areas in which the eleven schools might stand together in their relations with federal agencies.

Under the present administrative arrangement, the chief role of the C.I.C. staff has been to provide a clearinghouse for material pertinent to the endeavor. From time to time, however, the staff has prepared studies in response to requests of member institutions. Among these have been reports on sabbatical leaves, the status of C.I.C. librarians, student economics, the origin of C.I.C. students, and a continuing inventory of existing co-operative arrangements in Midwestern universities.

Committee leaders are still reluctant to claim success for the enterprise, but they are aware that solutions found co-operatively by the Big Ten schools and the University of Chicago will have far-reaching implications. In 1957–58, the eleven C.I.C. institutions together awarded 27 per cent of the nation's Ph.D. degrees. As might be expected, these institutions furnished 47 per cent of the degrees in agriculture; it is not so well known, however, that they awarded 48 per cent of the degrees in astronomy, 31 per cent in botany, 44 per cent in inorganic chemistry, 55 per cent in pharmaceutical chemistry, 58 per cent in agricultural economics, 64 per cent in agricultural engineering, 39 per cent in civil engineering, 50 per cent in food technology, 42 per cent in geography, 30 per cent in geology, 39 per cent in public health, 40 per cent in ancient history, 31 per cent in modern language and literature, 79 per cent in library science, 40 per cent in music, 53 per cent in pharmacology, 33 per cent in physiology, 30 per cent in general psychology, 30 per cent in public welfare, and 30 per cent in zoology.

The Effect of a University's Graduate Program on Its Undergraduate Education

An Optimistic Analysis

By R. K. Murray

GRADUATE schools, despite their number and their high prestige, are Johnny-come-latelys on the academic scene. They originated in the years 1876 to 1900, when American higher education was expanding at an extremely rapid rate and the introduction of new disciplines, especially the sciences, was bringing about revolutionary changes in the bases upon which it traditionally rested. In that era, discussions ran rampant, not only about the proper nature and content of higher education, but about the specific function of the new graduate schools. William Rainey Harper of Chicago, Daniel Coit Gilman of Johns Hopkins, and G. Stanley Hall of Clark believed strongly that separate graduate universities should be created, thereby keeping the graduate function clearly delineated. Several such experiments were tried, but they did not succeed because of the necessity of economy and because of the urgent need to supply one's own graduate students. Hence a German model of graduate work was rapidly grafted onto existing undergraduate programs whose heritage was British.

This trend has continued to the present time. Except for a few institutions like Chicago and Columbia, the intermingling of undergraduate and graduate students has occurred at an accelerated pace. So also has the fusion of graduate and undergraduate faculties, the teaching and research functions being theoretically joined.

This integration has never proved fully satisfactory. The graduate school came into being mainly under the pressure of the sciences, and this, in turn, meant the primacy of research. Indeed, from the beginning, research activity has been the *raison d'être* of graduate study. To underscore this, both President Hall and President Harper introduced radically light teaching loads into their institutions even before the turn of the century, encouraged faculty research, and reserved the greatest rewards in the academic arena for those who published.

The undergraduate operation, meanwhile, remained essentially dedicated to the teaching of basic content material. Its primary task was

R. K. Murray *is chairman of the Department of History and assistant to the dean of the Graduate School, The Pennsylvania State University.*

the dissemination and verbalization of knowledge, not the creation of it. The undergraduate college produced "doers"; the graduate school, "thinkers." In academic circles the latter activity had the higher status; undergraduate instruction was therefore often thought of simply as a chore and a bore. And whenever teaching and research vied for supremacy on a university campus, research almost invariably won out.

It is this fact—namely, that graduate programs can and do sometimes stifle undergraduate programs or make research the omnivorous beast of the academic forest—that goes to the heart of the historic controversy over graduate programs and their effect on undergraduate programs.

RECENTLY this situation has been given much publicity. Two years ago, Earl J. McGrath, of the Institute of Higher Education, published a provocative study called *The Graduate School and the Decline of Liberal Education*.[1] Last year, Bernard Berelson produced a weighty volume entitled *Graduate Education in the United States*.[2] Interestingly enough, the one is a direct refutation of the other, yet both allegedly are based on the latest behaviorial evidence and scientific research.

Mr. McGrath thinks graduate schools warp undergraduate education and squeeze the life out of it. He maintains that graduate schools raid undergraduate staffs, encourage a rigid sequential undergraduate-course specialization, subordinate teaching to the research function, break the teaching faculty's morale, and through sponsored research often predetermine the curricular future of higher education. Besides all this, says McGrath, graduate schools are conservative and inclined to resist change. Come what may, they retain the Druid-like ceremonies of the doctoral examination and insist on the fulfillment of often useless requirements, such as foreign languages for all Doctor's degrees. Moreover, they devour their own young in the sense that they do not reproduce the teachers necessary to sustain high quality in college and university education in the future.

Mr. Berelson denies most of this. He claims that there is no viable substitute for research in graduate study, that the Ph.D. is a most useful and proper degree, that graduate work should not be weakened simply to meet a suspected or temporary crisis, and that the college-teacher shortage is greatly exaggerated. Moreover, says Berelson, the vast majority of students and employers think graduate education is all right the way it is. Only the *avant-garde* educator is really dissatisfied with it. As for the relationship between graduate and undergraduate programs, Berelson points out that it is the high-quality graduate—not undergraduate—program that distinguishes the leading educational institution from the average.

These arguments by McGrath and Berelson are as old as the graduate-

[1]New York: Teachers College, Columbia University, 1959.
[2]New York: McGraw-Hill Book Company, Inc., 1960.

undergraduate dichotomy in this country. Statements similar in nature can be found dated 1904, 1908, 1912, and they present essentially the same allegations and refutations. It would seem, therefore, that when we deal with this problem we are plowing in much the same old furrow.

WHAT, then, does this historic and acrimonious debate over graduate versus undergraduate programs mean for those of us who are interested in the contributions a high-quality graduate program can make to an undergraduate program? I think the controversy forces us, first of all, to reiterate and re-emphasize the positive assets of a high-quality graduate program, and secondly to assault and eliminate the deleterious effect of graduate education on the undergraduate operation.

Specifically, there are many advantages which a graduate program offers to an undergraduate program at the same institution. Usually, many more resources are available to the undergraduate student in a university that offers a graduate program than in one that does not. This is certainly true in respect to faculty skills, the quantity and quality of equipment, and library facilities. In short, an undergraduate student at such an institution has the opportunity to have a much richer and more meaningful educational experience.

But he has more than merely better physical facilities and better teachers. The existence of a high-quality graduate program permeates the entire university with an atmosphere of creative thinking and of productive, not simply pedestrian, research. In the undergraduate program and its students, such an atmosphere of "discovery" breeds a taste for intellectual excellence and encourages a constant search for relevancy between apparently diverse areas of specialization. Thus, an undergraduate can, if he is receptive, acquire a breadth of philosophical orientation to his own field of study which is seldom possible otherwise. Moreover, where a graduate program exists, there is usually less emphasis on textbooks at the undergraduate level and more emphasis on the use of the library; certainly there is more stress on the acquisition of language skills.

It is also true (at least it is the belief of hiring officers) that institutions with graduate programs secure better-trained and more experienced junior-staff members for their undergraduate programs than do those which have no graduate programs. The soundness of the motivation behind this attraction on the part of both groups may be questioned. Yet the impact on the undergraduate program remains—more competent undergraduate instruction. At the same time, institutions with high-quality graduate programs have been, historically, the chief experimenters with fundamental reforms in undergraduate teaching and curriculums. Harvard produced the important statement on general education some years ago. Before Harvard, Chicago undertook radical reforms in its approach to a proper undergraduate education. Yale, Syracuse, and

Rochester produced the recent ground-breaking programs in teaching internships, and there are many other such examples. This type of broad experimentation is usually not feasible on a small undergraduate campus, or, if undertaken, it frequently remains uninfluential in the larger academic community.

IF THESE are some of the assets a high-quality graduate program can offer to an undergraduate program, the deleterious effects are not so formidable as they at first appear. What is required, however, is a bald admission on the part of those who conduct the graduate program that it has at least a partial responsibility for maintaining excellence in the undergraduate program.

The widespread use of graduate assistants for undergraduate instructional purposes should be severely curtailed. It can be debated that such graduate assistants are the equals of many instructors on the average small campus, that these young assistants know the latest in their fields of specialization, that they possess a proper mental attitude and are not yet embalmed in the humdrum of an uninspired academic existence. Still, it is obligatory for instructional departments to make the superior knowledge and skill of senior-staff members available, at least on a limited basis, to the undergraduate program. Indeed, there is considerable merit in the suggestion that most graduate faculty members ought to participate in some undergraduate instruction each quarter or semester.

Even more important than such participation is the probability that many graduate faculty members might profit from some refresher activity in both the methods of teaching and the philosophy of the learning process. Conceivably, a high-quality graduate program might require something of this sort from its staff members. There is much to be learned, or re-learned, by even the seasoned graduate instructor, about the skillful presentation of material to different age-groups. It simply will not do for the research-oriented teacher-scholar to act as if no progress had been made in fields other than his own and as if the teaching process were still at the same point of development and understanding it had reached when he was in graduate school.

A high-quality graduate program should strive to break down the barriers between the graduate and undergraduate segments of the university community, especially the barrier of inadequate communication. Periodic seminars of undergraduate instructors and graduate-faculty members might be arranged. Through such contact and through closer identity of purpose, one might hope that the graduate element would little by little come to support rewards for excellence in undergraduate teaching almost as readily as it now does for competent research and scholarly publication. There is really no need for any unbridgeable gulf or professional antagonism to exist between good undergraduate and good graduate instructors.

PERHAPS the greatest challenge the undergraduate program presents to the graduate program is the necessity that the latter accept the responsibility not only for instructing prospective college teachers in what to teach but also for showing them how to teach. So far, the graduate school has not accepted this challenge, and its failure to do so represents a real chink in the graduate program's armor. This situation must be remedied, but it can be remedied only by the instructional departments themselves, not by some outside agency such as the college of education. Obviously, the latter may have valuable contributions to make; nevertheless, the primary responsibility rests with the subject-matter departments. Unquestionably, the best graduate programs of the future will be those that satisfy this dual need of teaching the "what" and the "how." Surely no other activity a graduate program might undertake would have a more salutary or lasting effect on the quality of undergraduate instruction.

Finally, a good graduate program should move aggressively to break down the artificial age and course restrictions which now divide it too neatly from the undergraduate level. It should be so organized as to give qualified undergraduates an early introduction to graduate courses and to encourage participation in graduate work on the basis of intellectual capacity and maturity, not on chronological age or the degree held. There should be a constant recruitment program in operation which would virtually obliterate the abrupt movement from so-called undergraduate work to graduate work. For example, undergraduates with high scholastic averages might be encouraged jointly by instructional departments and the graduate school to take at least one graduate course in their senior year for which they could later receive credit toward a graduate degree. Similar recruitment experiments might be initiated.

Certainly I have not mentioned all, or even most, of the problems and ramifications stemming from the graduate-undergraduate duality of American higher education. But, despite all the controversy and all the arguments to the contrary, I remain optimistic. Evidence clearly indicates that the existence of a high-quality graduate program does materially benefit an undergraduate program. Significantly, there is a growing awareness among university faculties that it can contribute much more than it does now.

Improving the Mathematical Training of Soviet Engineers

By A. F. Bermant

Translated by Ivan D. London

THE problem of the mathematical education of engineers has many different aspects, most of which are interdependent. But one of the chief aspects is undoubtedly the prominent role played by mathematics in the development of technology. After examining the state of mathematical training of engineers in the higher technical institutions, we are obliged to affirm that its current level is still far below that demanded by contemporary technology and the imminent developments in that field.

In order to explain the most important causes of our justifiable dissatisfaction both with what our students know and with the way the course of mathematical studies is organized, and to propose measures for the elimination of these causes, let us begin with the state of affairs in the work of the departments of mathematics.

What are the principal defects in the mathematics training of many students which show up in higher technical institutions? In the first place, one must note the superficiality of their knowledge of the mathematics studied, their unsureness of the subject-matter, and their inability to apply the mathematics learned, sometimes even in the simplest cases. The limited scope of the mathematics learned is just as serious a defect. Because of this it becomes more difficult to utilize various branches of this discipline in the requisite degree for the solid study and mastery of the specialized disciplines.

These basic defects are closely connected with the great volume of the material to be taught, which is often incommensurate with the capabilities of the students, with the formalism employed in the method of teaching, and with the failure to make sufficient demands on students. Let us stop to consider each of these important factors.

Until recently, the mathematics programs offered contained a good

Translator's Note: On May 20, 1959, a conference of directors of mathematics departments in higher technical institutions was held in Moscow to discuss the mathematical education of Soviet engineering students. A. F. Bermant, now deceased, was the presiding officer. This article is based on the paper which he read at the conference, and which appeared in *Vestnik Vysshel Shkoly* (*Herald of the Higher School*), XVII (July, 1959), pp. 64–70.

Ivan D. London, *the translator, is an associate professor of psychology at Brooklyn College.*

deal of formalized apparatus consisting of analytic geometry and analysis—an apparatus which had been developed in the distant past and whose content did not meet contemporary requirements. The Mathematics Program–Methods Committee of the U.S.S.R. Ministry of Higher Education cleansed these programs of many of their purely formal components and archaisms and established minimum standards of knowledge, which it is the duty of every department to enable students to meet.

Formalism in the methods of mathematics teaching usually has two extreme manifestations. The first consists in a primitivism, a crude simplification, and the downward adjustment of teaching method to the level of the weakest students. Here we find course material presented on a low theoretical level—a level which precludes the development in students of mathematical thinking and of capacity for theoretical knowledge and generalizations. Here also, demonstration of the material presented is purely external, that is to say, verbal. This kind of formalism, often admittedly necessary, is met with most frequently, on the one hand, when the level of preparatory training of students for higher technical institutions is too low, and, on the other hand, when the teachers attempt to cover the entire program within the time allotted in the academic plan. Sometimes—why hide the fact?—formalism follows as a consequence of the teacher's own inadequate training.

A second kind of formalism manifests itself, in an opposite direction, in an attempt to prove propositions which are entirely self-evident; that is, in an exaggeration of rigorous deduction and its role in the exposition of a subject.

Finally, the very understanding of what it means to *know* a subject, what sense should be conveyed by the concept of "satisfactory knowledge," has undergone a powerful and unfortunate metamorphosis in general; that is, not only in the field of mathematics. A rather widespread opinion exists that a student's knowledge is adequate if he has grasped the general conceptions and knowledge, not of the whole content of a question, but only of its contours. It is utterly impossible to agree with this. We ought to demand full knowledge of subject-matter. But in order to impart it, teachers are required to teach mathematics with such care and clarity that it will be understood, firmly mastered, and remembered by the student after he has graduated from a higher technical institution. The material that is contained in the mathematics programs should be considered the minimum needed, and a teacher should require that every student master it.

NOW let us proceed to the second serious defect—the limited scope of mathematical knowledge. At a time when technological sciences require knowledge of various more or less special mathematical topics for exposition in finished form or in a form suitable for pedagogical purposes, yet corresponding to contemporary demands, teachers in the

departments of mathematics are forced to limit their instruction to the fundamentals of analysis, which comprise, properly speaking, selections from the Newtonian arsenal of mathematical techniques or, at most, the Eulerian arsenal of techniques. One hardly needs to demonstrate the inadequacy of such instruction in these times.

It is generally known that the very ABC's of theory in the technological sciences depend on vector analysis and field theory, the theory of equations of mathematical physics, the theory of functions of the complex variable, probability theory, differential geometry, and the like—divisions of mathematics which are not taught in the basic course of mathematical studies. And that is not to mention the more recent technological theories—such as those in electronics, radio technology, automation, and rocketry—which require, along with knowledge of the aforementioned classical problems of analysis, knowledge of other, sometimes more refined, mathematical problems (spectral analysis, theory of chance processes, information theory, and so on). The thoughtful and knowledgeable teachers of the technological disciplines make just claims on mathematicians, but frequently we cannot satisfy these claims.

We have already indicated that the structure of the academic course of mathematical studies ought accurately to reflect the structure of mathematical science which is developing and exerting an influence on the whole field of technology. Accordingly, the academic course ought to be, so it seems to us, a natural interlocking of three major areas: (1) classical analysis, with its contemporary developments, whenever possible; (2) methods of approximation in computational technique; (3) information-probability theories (provisional designation of a group of new mathematical theories—in particular, the theory of regulation and cybernetics, leaning most heavily on statistical-probability methods). Of course, not all these component areas are of equal weight: the first, the classical area, should occupy the dominant place, not only now but always; however, an ever greater role will gradually be assigned to the second and third areas. Obviously, it will soon be impossible for a literate engineer to do without them.

To this day, only the first area, classical analysis, has played a role in the system of mathematical education of engineers, and in rather obsolete form at that. It is obvious that limitation to this area alone is no longer possible. The time has come gradually to bring what we present to students in mathematics courses into closer correspondence with what it is *necessary* to present. In the recently issued minimal programs it has been decreed that a judicious selection be made of many topics from the different divisions of classical analysis required by the various higher technical institutions that are geared to the same programs, and a first step has been firmly taken toward introduction of the second area into the practice of teaching: each student is now required to complete five to eight computational work-assignments.

So that new scientific facts may be incorporated in the subject-matter of teaching, they should be processed from the pedagogical standpoint and integrated in the work of the various courses. We shall have to get busy on this very important matter, which is a constant problem in all three areas, especially in the third. Various textbooks, methods manuals, exercise books, and the like, will have to be written. Unfortunately, serious work on all this has not been pursued. Such work is not thought of very highly; scientific research, however slight, is viewed as much more important than work on the teaching of mathematics.

A sufficient number of hours has been allotted to carry through the now-confirmed minimal programs (so-called) in the course of higher mathematical studies for higher technical institutions. The free academic time now available should be utilized to introduce instruction in problems in analysis and in approximation and information-probability methods into the working program of the department of mathematics. Here is a wide field for the exercise of joint creative initiative (under control, of course) by technological departments in a given specialty and by departments of higher mathematics. Let us adduce an example.

The minimal program does not include a study of the differential geometry of surfaces, necessary for teaching the theory of envelopes, necessary for specialists in construction mechanics, reinforced concrete, and the like, but not at all necessary for wireless operators or metallurgists. In the first instance, therefore, the program should be appropriately supplemented; in the second, material on Fourier series, field theory, and so on, should be included in its stead.

The way academic plans of higher technical institutions are set up for the first years of instruction, when mathematics is studied, makes for a very serious defect, the establishment of a wrong relation between the separate disciplines and varieties of activity. There is not, nor can there be, an indicator which points exactly to the relative place this or that course should occupy in the general balance of the amount of energy (including, in this concept, time, work, and effort) the student must expend to gain a thorough mastery of the academic program. However, specialists can and should determine approximately what position each course should hold.

Most mathematicians and technologists think that the specific weight of mathematics in the first two courses of studies in a higher technical institution should not be less than 25 per cent of the general "energy-balance." And it is possible to understand our justified concern if this index in fact stands at not more than 10 to 12 per cent in the academic program.

Let us adduce some figures, for example, for the specialty of construction—they apply to other specialties also. On the average, in the course of the first four semesters, out of thirty-six weekly hours, five are allotted to the mathematics course. If we keep in mind that many

disciplines in the first two courses of studies require much technical work (mechanical drawing, geodesy, and the like), closely tied in with knowledge of mathematics, the time allotted to courses in mathematics should be 25 per cent.

For considerations that are purely formal—again without taking into account the significance of the subject—in the academic programs no examinations in mathematics are stipulated for several semesters (sometimes they are not even held at the termination of the course of mathematical studies). We consider this a great defect and think that there should be a strict decree that each semester should without fail be concluded with an examination in mathematics.

NOW, how do our teachers and students utilize the mathematical knowledge which is taught? Let us look at such disciplines as physics, mechanics, and resistance of materials, which serve as "connective tissue" between mathematics and the special technical disciplines, or, to be more exact, as "transferrers" of mathematical knowledge. We often observe a clear undervaluation of the available mathematical apparatus in the teaching of these disciplines which leads to the lowering of "mathematical potential," to "evaporation" of knowledge, and to loss of acquired skills. Naturally, this makes it difficult to teach the special disciplines at the level the contemporary state of science demands.

It also sometimes happens that a teacher presents his course on a low theoretical level, ostensibly because of limited knowledge of his students, but actually because of his own inadequate training. It is necessary to rectify this situation, and, above all, to organize a serious scientific retraining program for teachers in the applied sciences. It is essential to be continuously and deeply aware of the exceptional contemporary importance of mathematization for the general technical and special disciplines (in proper proportion, of course); it is necessary, also, to demand that students constantly utilize fully the mathematical knowledge that they have, and to maintain an unforgiving attitude toward ignorance. If all this is done, not only will the mathematical knowledge of the student be preserved and developed, but the scientific level of all technical education will also be advanced.

It is clear that special attention is required by first-year students with work experience; that is, students who have a minimum work record of two years, and who, as a rule, have entered a higher institution after an interruption of their regular schooling. We are convinced that certain gaps in the knowledge of elementary mathematics of persons with such background ought not to interfere with their admittance into an institute, provided their potential capability for study in a higher technical institution is established. But, rather than let matters ride, their program should be so organized that measures to overcome gaps in their knowledge are undertaken from the very beginning. This can be done

through supplementary assignments, consultations, and even the substitution of special lessons at the expense of regular program-material—if absolutely necessary, it can be done at the expense of the final topics of the regular program.

ONE of the initial reasons for deficiencies in the mathematical education of engineers is undoubtedly the inadequacy of their secondary-school training. In 1957 and 1958, the joint scientific-methods seminar of the departments of higher mathematics in the higher technical institutions of Moscow made a thorough and detailed study of the results of the entrance examinations in mathematics at the higher technical institutions of the city. After listening to the reports presented by the representatives of many large institutes in Moscow, the participants in the seminar were compelled unanimously to express their dissatisfaction with these results: even in the largest and most popular higher technical institutions, the competition in mathematics, which should exist, in actual fact did not. [In other words, mathematical performance was almost uniform.] Briefly, the results can be summarized as follows: graduates of the secondary schools disclose weak mathematical development, which is revealed by deficiencies not only in knowledge of elementary mathematics but also in skills in handling mathematical operations. Actually, these are the same defects which are encountered in mathematical training in the higher technical institutions.

One might have expected that in the light of the radical changes that the secondary school is undergoing in connection with the reform of the whole system of education, a marked improvement in the mathematical training of pupils would be noted. Unfortunately, this is not true. The new school programs in mathematics set up by the Russian Republic Academy of Pedagogical Sciences were subjected to sharp criticism in the seminar, and later in the Moscow Mathematical Society. These programs make no provision for teaching combinations, the binomial theorem, inverse trigonometric functions, and certain transformations, all of which are necessary for normal learning in the course of higher mathematical studies in higher educational institutions.

We consider that school programs ought to be oriented to the requirements of the system of higher education. Not only must we be freed from the necessity of closing the gaps in elementary mathematical training in the secondary schools—a necessity which is an unwarranted burden to the teachers of the higher schools—but in time we must also raise considerably the requirements for entrance into higher technical institutions and the quality of the teaching of mathematics there. Together with the question of mathematical education in the secondary school, one ought also to review the question of education after graduation from a higher technical institution; that is, the question of restoring the mathematical knowledge which the engineer has lost, and of supplementing it.

IN ORDER to master the irresistibly developing fields of technical science and to understand what is taking place in them, our engineers have more and more need of mathematics. This is the reason for the great interest currently shown in the theoretical and practical questions of mathematical science, an interest we must acknowledge we concern ourselves little with satisfying, although it is clear to everyone that under contemporary conditions it is very difficult to achieve significant progress in technology without raising the level of theoretical training of our engineering cadres.

In several institutes specialized courses exist for the advanced training of engineers. These courses, however, are frequently poorly staffed, and, unfortunately, do not satisfactorily perform the tasks set before them. We consider that the newly founded departments for the advanced training of engineering cadres in the higher technical institutions should, first of all, be provided with teachers who are highly qualified.

Short Contributions

Grade XIII: Lucky or Unlucky?

A questionnaire which was sent to 170 teachers in college reading-improvement programs during the fall of 1960 included three items embodying statements made by eminent educators that reflect unfavorably on the proficiency and motivation of college students:

1. Do you agree with the following statement of W. C. Warren, dean of the Columbia University School of Law: "The inability of college students who come to us to read and write is a malady of epidemic proportions"?
2. Do you agree with the following assertion of James W. Case, president of Bard College: "I suggest that the majority of . . . [college] students deliver something like 40 to 60 per cent of their potential power to the driving wheels"?
3. Do you agree that the following conclusion of James B. Conant applies to the college level: "In no [high] school which I visited did the teachers or students feel that the majority of *academically talented* boys or girls were working to full capacity"? (The italics have been supplied.)

In response to the first question, 109 teachers agreed with the statement made, 45 disagreed, and 16 were undecided. The second question was answered affirmatively by 130 teachers and negatively by 12; 28 were undecided. The third question elicited the following responses: 145 teachers were in agreement, 12 disagreed, and 13 were undecided.

This statistical disclosure of the lack of proficiency and incentive of American college students is a persistent theme in the professional writings. Yet the inescapable fact that students lacking proficiency and incentive are poor learners does not seem to have induced concerted action. Numerous American colleges, for example, fail to offer reading-development programs, and many of the schools that provide such instruction limit guidance to one segment of the student body.[1] Moreover, a new emphasis on self-education is leading to a fresh view of the teacher's function in the college curriculum. Impelled by the predicted doubling of college enrollments between 1959 and 1967, the American college system is being modified by greater use of television and inde-

[1]Phillip Shaw, "Reading in College," *Development in and through Reading: 60th Yearbook of the National Society for the Study of Education, Part I* (1961), XIX (Chicago: University of Chicago Press, 1961).

pendent study to increase learning from machines and books. The teacher of the future will be less an expositor of information and more an organizer of learning experiences. The student of the future will participate in a greater "do-it-yourself" educational experience. Would it not be strange if American colleges were to disregard the absurdity of requiring greater academic independence from students known to be deficient and unwilling to exert themselves? Does American education contemplate adding a story to a house with an insecure foundation?

Considerably obscuring the problem is the assumption common among college teachers that their students are deficient because the high schools are guilty of neglect. In addition, many colleges assume that the obligation of removing the student's deficiencies lies with others. Consequently a great many students fail to develop during their college years the necessary skills and incentives for higher learning. If wrong, these assumptions are a threat to the intellectual fulfillment of millions of Americans every year. They need to be challenged. In the recent report of the American Council on Education on institutional research, for example, individual institutions are urged to conduct studies of the characteristics of their students. The report describes as "most important" an investigation of all of the conditions contributing to student success or failure, and, in the case of the many institutions where large numbers of students fail to graduate, recommends study of the question, "Is there a relationship between the loss of students and the adequacy of services provided to meet student needs?"[2]

More investigations must be conducted on the reasons for failure at college. A study made at the University of Wisconsin in 1959 revealed that many able students were not living up to their promise at college. In the words of the *New York Times*, the "cream" of its students proved to be "sour." A conclusion reached in the Wisconsin investigation demonstrates the necessity for more research to challenge the assumption that the inadequacy of our college students should be blamed on our colleagues in the high school:

> The change in educational climate from high school to a college or university is abrupt . . . . Even top-ranking high school graduates shiver and chill in this sudden change of weather . . . . The beginning college student is confronted with a situation like this. In high school he expected to be taught; in college he is often expected to learn without being taught. In high school he may have ranked above more than 90 per cent of his class; in college he may find [that] one-third of his classmates surpass him . . . . In high school he was frequently marked on the basis of his personal achievement and progress; in college he frequently finds himself marked in relation to the achievement of someone else, regardless of his satisfaction with his own progress.[3]

[2]A. J. Brumbaugh, *Research Designed to Improve Institutions of Higher Learning* (Washington, D.C.: American Council on Education, 1960), p. 10.

[3]*Explorations into the College Plans and Experiences of High School Graduates: A State-Wide Inquiry* (Madison, Wisconsin: School of Education, University of Wisconsin, 1959), pp. 97–98.

Add to these facts the following: The incoming college Freshman has more than double the homework formerly assigned to him in high school. He is expected to get more from the printed page than previously, and his textbooks are of greater scope and depth than those he studied in high school. His teachers require him to be more attentive in class and to attain greater mastery of subject-matter. In sum, the entering Freshman is beginning Grade XIII, which can be a very unlucky number for him if he lacks the proficiency and incentive for learning at college.

Besides adjusting to a new climate of learning at college, the beginning Freshman must satisfy the demands of a fresh and severe test of his personal tastes, attitudes, and convictions. In the relatively uncritical setting of elementary and secondary schools, where pupils of greatly varying aptitudes and interests participate, teachers cannot sufficiently arouse the creative doubt requisite for appraising incentives and values. How important it is for students on the threshold of a college education to acquire ability in critical evaluation is evident when one keeps in mind the potency of another form of "education" that our students receive daily. By a masterly science of persuasion, the Madison Avenue "educators" have created in the minds of many Americans images and goals that are in polar opposition to those upheld by school educators. For example, in contradiction to the life of the mind emphasized at school is the image of the outdoor type idealized by current advertising: the lumberjack, the riveter, the crane-operator, the stock car–racer. A college Freshman who is impressed by this image does not develop the incentive required of a true student. Then there are the goals of leisure and comfort that Madison Avenue preaches. If an incoming Freshman's ultimate aim in life is to enjoy the benefits of materialism—the compact car, the suburban split-level home, the noiseless air-conditioner, the self-defrosting refrigerator; if he looks forward to a life of diminishing discomforts—advertisements promise him that he can reduce his discomforts by drinking beer when he is hot, whiskey when he is cold, and an aspirin-soda when he is worried—these drives must be exposed, examined, criticized, and (hopefully) converted into intellectual aspirations. At Grade XIII, the college Freshman should develop the proper incentive for learning.

Developing the necessary proficiency and incentive for learning at college is a deeply personal experience. As we alter our educational practices we must scrupulously avoid educating Freshmen by impersonal mass-production methods. Every student should be convinced that all of his teachers are interested in his personal development. The following items, which are part of the questionnaire quoted earlier, were designed to elicit responses concerning the wisdom of an educational policy that creates in the students of an entire incoming class the impression that their new school is deeply interested in their personal development.

> Do you agree with the declaration of Constance Warren, former president of Sarah Lawrence College, that graduate schools should [give] all prospective college teachers training in counseling their classroom students on academic matters (e.g., reading habits)?
> Do you agree with the view that every college teacher of lower [division] Freshmen should make a special point of helping his students to develop their proficiency in the reading skills and related skills for functioning effectively in his particular field of subject-matter?
> Would you yourself be willing to conduct experimental seminars for selected teachers on your campus (e.g., teachers of freshman courses) on how to help students improve their reading skills, if appropriate "released time" from your other duties were granted you?

The statement made in the first item met with the approval of 99 teachers; 17 were not in agreement with it, and 12 were undecided. Of 128 teachers responding to the second item, 111 agreed, 10 disagreed, and 7 were undecided. The question posed in the third item was answered affirmatively by 88 teachers and negatively by 13; 27 teachers qualified their replies.

From these questions and answers there emerges the image of a teacher of lower-division Freshmen who is a special kind of instructor. He is aware that his students have reached the critical thirteenth grade, and that, if they do not develop proficiency and incentive for learning, they will fail to profit fully from the college experience ahead of them. This specialist is concerned with how his Freshmen learn, as well as what they learn.

The report on institutional research referred to earlier in this paper expresses concern about the morale of teachers in a college a substantial number of whose entering freshman class is not expected to graduate. Teachers participating in a program designed to strengthen their students' skills and motivation for learning will not be confronted by the difficulty of having to teach subject-matter to students who need, but are not receiving, guidance in learning. In colleges that select their potential graduates by admission rather than retention policies, campus morale will also be heightened by a systematic program of teaching beginning students to work to capacity. Nothing can so effectively motivate a teacher of Freshmen as the knowledge that his instruction is meeting the need of his novitiates to develop their intellectual resources in a particular field. And nothing can so effectively motivate an instructor of upperclassmen as the knowledge that his students have acquired a sturdy foundation on which to build in their special area of instruction. For all of the teachers on the campus, then, Grade XIII will indeed be a lucky one.

Let us turn to the student at a college where Grade XIII is lucky: In the social-science classroom, the lower-division Freshman will learn

how to interpret maps, charts, and graphs; how to trace events in proper time sequence and to discern cause and effect in social and historical writings; how to read and compare sources critically; how to recognize the semantic values, both positive and negative, of words used in reporting; how to distinguish fact from opinion, propaganda, or argument. In a course in literature, either in his native tongue or in a foreign language, he will receive guidance on what to look for in literary history, biography, and criticism; on how to detect social, ethical, and religious attitudes in literature; on where to look for and how to interpret clues to literary themes; on how to recognize and interpret examples of the technical devices the writer uses; on how to respond to expressive language. In the science and mathematics classroom, he will be taught how to read directions for solving problems or determining a sequence of operations; how to visualize, from a written description, the apparatus to be constructed or the operations to be performed; how to collate verbal, quantitative, and symbolic expressions of formulas, laws, and equations; how to detect the implications and significance for his society and culture of past and present discoveries. In each course, he will become familiar with a technical vocabulary and the special concepts implicit therein, and he will receive guidance in the use of textbooks and basic reference books. Each of his teachers will help him develop skills of oral comprehension, note-taking, recall and application of what is learned. Finally, the aim of all his classroom instruction will be to assist him in developing permanent reading interests, a zest for learning, a respect for the proficient use of human intelligence, and a clear idea of what a college education can mean to him intellectually, culturally, and morally.

PHILLIP SHAW, *Brooklyn College*

Numbers In Composition

More than deans and presidents, more than trustees and taxpayers, more than counselors, psychologists, and dormitory managers, it is the composition instructor who needs to concern himself with the problems of rising enrollment. The experts are nearly unanimous in their predictions of the approaching flood; alarming omens appear in the existing supply of science teachers and in the increasingly unfavorable student-teacher ratio in high-school English classes, where actual practice in writing is often no longer possible. The numbers are on their way, and if we do not prepare for them, our whole scheme of things is in danger of collapsing. Huge composition classes simply do not admit of much writing; the danger is that the composition course will become merely "English," an illogical compound of grammar and literature. This is already the state of affairs in most high schools and in many colleges. Of the solutions already proposed, ranging from teaching by television to the correction of papers by students, none has yet won general acceptance, and another proposal is hence not out of place.

The arrangement suggested here is intended to allow an expansion of composition classes from the typical twenty-five students to thirty-six—a statistic to delight the administrative heart, since it increases the instructor's productivity about 50 per cent. In a given week, two-thirds of the students would submit regular written themes, to be corrected by the instructor in the traditional manner. The other third would present their themes orally in class; these students would not turn in complete manuscripts but would submit outlines which the instructor would have before him as he listened to the papers. The instructor would comment orally on the papers at the end, make such notes on the outlines as occurred to him while the presentation was being made, and assign grades; but he would not, if saving time were the object, take the outlines home with him for further review. He might wish to adopt the practice followed by speech instructors of using prepared forms on which he could simply check off the aspects of the paper which needed attention. For example:

	Good	*Fair*	*Poor*
Main Idea.....			
Detail.....			
Arrangement.....			
Transitions.....			

Since a standard five-hundred-word theme requires about five minutes to present, it must be expected that the oral papers and the instructor's comments together would take up about half of the normal three-hour week. (These figures are based on the experience of elementary-speech teachers.) We have spoken throughout in terms of classes initially at twenty-five, since that is the most common figure at present, and we have suggested increasing them to thirty-six, since that number seems to be the maximum that can conveniently be handled by this method. The scheme has applications for other situations, however; an instructor whose classes have already risen beyond thirty and who has consequently had to reduce the number of theme assignments might use this arrangement to restore the weekly theme. We have likewise so far assumed that the students would give oral themes in rotation, and that in general each student would perform orally every third week in regular sequence; but this might not always be the best arrangement. If the instructor were to call on students at random to read their papers, students would have to pay attention to spelling and punctuation on all assignments and would not be able to forget them in the week when they knew they were to read aloud. Possibly the better students might in general be selected; their themes would be more interesting to the class and their need for correction in mechanics less urgent. Doubtless, other variations are possible.

Thus far we have used the clumsy term "oral theme" to avoid the embarrassing question whether the composition instructor would actually be teaching speech, probably without having the proper qualifications to do so. As a matter of fact, it is possible to disassociate the plan from speech instruction almost completely. The student could simply read

a prepared theme, not deliver a speech from notes; the production would no more be an oration than is a paper read in a graduate seminar. The instructor would limit his comments on oral aspects to such obvious matters as audibility, correct pronunciation, and such phases of reading aloud as a potential literature teacher ought naturally to know. The temptation might be to extend the speech-teaching. One could imagine the instructor driven to this conclusion by exasperation at the ineptness of his students in "oral communication," or by the necessity of justifying the "oral themes" to students. Certainly, the student will be better satisfied if he thinks he is being taught to speak than if he thinks that he is merely helping the instructor to save his time; he and the instructor may feel frustrated if, uncriticized, he makes the same errors in delivery at the end of the term that he made at the beginning. The outcome of all this *could* be a course in which instruction in speech and instruction in composition were combined; but this is not a necessary consequence. In most institutions the safest thing would be to offer a course in which themes were occasionally read aloud rather than a course which pretended to teach both speaking and writing; certainly no speech instruction at all is to be preferred to bad instruction.

However little or much speech was taught, it might be felt that this was just another "communications" course. Whether the term is applicable depends on what meaning we attach to the word "communications." In the loose sense, according to which any course that offers even the most minute and inadequate instruction in speech is so termed, our course would certainly be a communications course; but the word has also a more restricted sense in which it implies not only the whole quadrivium of reading, writing, speaking, and listening, but also a philosophy of language, a special kind of sectioning, and other features which are no necessary part of our scheme. The present writer would not care to be regarded as accepting any more of the communications philosophy than the theoretical possibility of teaching speaking and writing together.

Such problems as these are as much political as academic, and will trouble the conscientious teacher far less than the question of the effect of such an arrangement on the quality of instruction in writing. Without experiment and research to guide us, we can only reason deductively and by analogy. What is lost is clear—much class discussion will have to go to make room for the speeches; our consolation here is that in many composition courses much of this discussion has more to do with sociology than with writing, and that the amount of composition theory that the student can profitably absorb does not require three hours a week for a year. Every third theme, being oral, will not be corrected for punctuation or spelling; for weak students who constantly need practice in such matters, there is a loss, though possibly not a serious one, since two-thirds of the papers will still be scrutinized for such matters. The students can gain something from hearing each other perform, especially if they are required to write critiques (but if the instructor has to correct criticisms,

he will not save much time); they should certainly gain from hearing the instructor criticize the oral themes. Periodically, they will be forced to consider an audience and will have to abandon their conception of a theme as a private letter to the instructor. The effectiveness of our plan is not established, but neither can its ineffectiveness be taken for granted. Only long experience or a carefully controlled experiment could give the answer.

Certain other considerations might help to determine the acceptability of the idea on a given campus; for instance, when freshman English must serve the double function of teaching composition and literature, so much class time could hardly be surrendered. One would not expect the average composition teacher to be enthusiastic about such an innovation as long as he had any hope of maintaining the existing ratio. For that matter, it is hard to imagine any teaching method which would make a class of thirty-six more attractive than a class of twenty-five. If irresistible circumstances force the size of classes up, such a plan as this has much to commend it. It would certainly accomplish more than a plan in which the number of themes was simply reduced, and it ought to be more attractive than plans which, through such devices as television or large lecture meetings, strive to relieve the instructor of his pleasanter classroom duties in order to leave him free to grade extra themes. We should gain nothing by representing this plan as a cure-all. If we tried it, we should have to be alert for any sign of deterioration in the students' ability to handle such matters as spelling and punctuation. At the same time, the plan is certainly workable and would permit larger classes; and it has, likewise, a positive side: we might be able to accomplish things not done in a conventional course. It is a plan which, unlike the use of television, involves small initial expense; because it does not disturb the conventional three-hour schedule or other established patterns, it would be easy to retreat from in case of failure. If circumstances require bold measures, we have here a kind of boldness which stops well short of recklessness.

JOHN C. SHERWOOD, *University of Oregon*

Academic Round Table

The Faculty Committee: Aid or Inhibitor in Achieving Educational Goals?

Is time spent on committees the necessary price of administrative democracy?
Could teaching and research be improved if all faculty time were devoted to these primary responsibilities?
Should faculty committees deal exclusively with policy matters, leaving administrative and executive tasks to administrators?

An Exquisite Balance of Nature

There are few things a college loves more than the committee and the mimeograph machine. Oddly enough, few committee members express great affection for the meetings of the former or for the effusions of the latter. Yet, year after year, the mimeograph machine turns to summon committees, and the committees convene, deliberate, and adjourn to keep the mimeograph machine turning.

There is in the meetings of college and university committees one of those exquisite balances of nature that biologists and zoologists used to stumble upon, much to their moral edification. A college administrator, realizing a kindred phenomenon within his own purview, might find his own sense of mystery developing. For surely someone's handiwork is in evidence.

The process may be described, so far as human insight can comprehend it, in this way. *One secretary working at one mimeograph machine duplicating for multiple distribution the minutes of the last committee meeting takes precisely some slight interval of time greater than that required for the current committee meeting.* This excess time is exactly the time required for the current committee chairman to deliver to this secretary the minutes of the current meeting, the appointment of the subcommittees, and the notice of the next meeting. The secretary can begin immediately to cut stencils while the mimeograph is engaged on the subcommittee reports issuing from the last meeting. The time required to run off the last subcommittee reports is always exactly the same as that required to prepare the stencil listing the appointments to the new subcommittees. Therefore, the mimeograph machine, immediately upon completion of the last subcommittee report, begins upon the various forms necessary to the appointment and summoning of the next committee and subcommittees. While the mimeograph machine (and throughout we are assuming an automatic mimeograph machine; replacement of the hand-operated mimeograph machine some years ago temporarily disrupted a rather more simple process and eventually resulted in the complex mechanism being delineated here) is so engaged, the secretary is transcribing and stenciling the minutes and recommendations of the current committee meeting. In all instances, unless the natural process is disrupted by an outside force, the secretary will finish

at some slight time interval before the mimeograph machine completes the notices for the next meeting. This time interval is always equivalent to the time required for the secretary to distribute to the various committee and subcommittee members these notices of the next meeting, and such a time interval varies precisely with the size of the committees or subcommittees to be summoned.

Distribution of the last notices are accomplished while the mimeograph machine completes the 45 or 50 copies customarily made for the office files. At the moment when the notices have been put in the mail or otherwise distributed, both secretary and mimeograph machine might be expected to come to a standstill. But this is never the case. Without perceptible loss of time or waste of motion, the secretary and the machine begin upon the minutes and recommendations which at that precise moment have emerged from a committee meeting just adjourned. Since these documents vary in length and are likely to be somewhat extended, it is all the more amazing that at some time in the process another committee or subcommittee will be convening to adjourn at precisely that same slight interval of time before the mimeograph machine completes its current assignment, which time is exactly the time required for the committee chairman to deliver to the secretary the minutes of that meeting, the appointments to the subcommittees, the recommendations of committee and subcommittees, and notices of the next meeting.

Thus the cycle is complete. Any deviation at any step would disjoint the entire process. Yet no such deviations occur, though continual subtle adjustments are being made throughout the process to account for excessively prolonged meetings, coffee breaks, inking of the machine, changing to legal-size paper, resignations of chairmen or of entire committees, and numerous other contingencies attendant upon a complex and continuous process.

The process is described in its simplest form: one secretary, one mimeograph machine, one parent committee, and a limited number of subcommittees. However, it has been verified that increasing the size of any of these constituent parts only magnifies the ordered complexity of the process. The exquisite balance does not alter. Once set in motion, the process appears not to diminish in vigor or to alter in precision. No one has yet explained what lies behind it.

KENNETH E. EBLE
University of Utah

The Importance of Faculty Committees

Are faculty committees a hindrance or an asset to the essential concerns of the academic man? Can committee time be viewed as the necessary price of administrative democracy? Would a decrease of committee work significantly increase the volume or the quality of teaching and research? The answers to these questions must be based on an appraisal of relevant educational practices and principles.

If a committee chairman lacks the ability to stimulate interest, to coordinate activities, and to give the members of his committee guidance; if committee members substitute meandering talk for concerted action; or if the best of committee decisions still meet with faculty or administrative indecision, then practical experience condemns the boredom, the frustrations, and the insults to responsible intelligence perpetuated by faculty committees. Yet some colleges report manageable tasks, productive sessions, significant consequences, and thus

satisfying practical experiences, with faculty committees. Thus the favorable or unfavorable arguments must turn on interpretations of principle.

Consider first the basic commitments of the academic man. If a scholar's chief concern is to immerse himself in study and to publish as fast as accumulated knowledge and borrowed typists permit, then committee participation is not only a hindrance but also a heresy. If the major concern is teaching students, then any barrier to preparation or performance is an obstacle to education, a threat to devotion. Faculty committees would fall under the ban. So would social sessions with colleagues, most campus spectator activities, and publication of books or articles that no student will read. If fusion of scholarship and teaching is the main educational purpose, then the individual scope is widened, but many of the pleasures and escapes in which professors indulge, including committees, would still need to be excluded.

Should such monolithic devotion be lessened on the plea of social amenities or academic relaxation, an academician has introduced a mundane counterpoise to the exercise of the teacher-scholar's high calling. With this addition of human delight to professorial dignity, however, he might as well affirm a third vocational interest: institutional duty.

However, the principle of institutional citizenship which undergirds participation in faculty committees does not need this backdoor entrance. It is widely admitted that the academic man has responsibilities not only as a teacher and a scholar but also as an institutional citizen or partner. This is attested by criteria commonly used for promotion, by the growing significance of the AAUP's Committee T on College and University Government, by credos about democratic operation, by appeals to "faculty rights" when professors dislike administrative decisions, and by a moral demand to attempt practice in one's milieu of what one preaches in book or classroom about communal needs and college responsibilities.

Within this cluster of vocational and professorial commitments is a rationale for a faculty having duties legislative, deliberative, and consultative. Faculty committees, then, have their importance as subdivisions of the faculty—a parliamentary body dealing with educational policy and other professional concerns. In addition to the practical merits of a suggestion resource (no administrator embodies all possible wisdom) and of initial support from those who are the forerunners of educational excellence, the rationale for faculty committees generally arises from the total obligations of academic man to his immediate college and to the educational world.

Consequently, participation in faculty committees is not so much the price of administrative democracy as the privilege of the academic man. However, the question arises whether teaching and scholarship would be improved if all of a professor's time and energy were given to them. Possibly. But so would his enjoyment of hobbies and coffee-break conversation be enhanced if he could pursue them uninterruptedly. Monolithic devotion is rare in our gregarious and interwoven culture. In any case, my argument is that the academician should accept responsibilities as teacher, scholar, and institutional partner. What is needed is a clearer vision of these interacting roles. More operative support for their productive efficiency is also needed. But should not the faculty and its committees deal exclusively with policy, leaving administrative and executive tasks to administrators? The question is am-

biguous. Who executes the educational goals of teaching? Teachers. Who executes the policy of scholarly research? Scholars. Who embodies the goals of learning? Students. The whole college is involved in carrying out educational purposes. With his budgetary and legal basis, an administrator supervising institutional operations should contribute to that wholeness. This would mean providing facilities for faculty committees dealing with scholarships, arranging for concerts or lectures, issuing memorandums on the curriculum, and so forth. Division of labor remains necessary. Nevertheless, mutual support of an organic venture rather than separation of attention and responsibility would seem the greater wisdom for both administrator and professor. Divorce of ends and means, as Dewey warned, is unfortunate.

With the best of rationales for faculty committees, the pleasures of lamenting ideas lost and time wasted in committee meetings will probably continue. However, the teacher-scholar who does not realize how his productivity is influenced by admission criteria, sources and distribution of finances, selection of colleagues, library resources, curricular demands upon both teacher and students, and extra-curricular affairs, including athletics, and who sees no point in faculty committees to consider such problems, is certainly a candidate for the ivory tower. By his rejection of social intelligence and institutional responsibility, he weakens the legislative prerogatives of the faculty and removes much of the moral basis for his protest against "business decisions," "arbitrary rulings," and other administrative failings. In an era when academicians are assuming increasingly valuable roles in national and international affairs, he supports no educative parallels for statesmanship in that mirror of the world, his own college. And he splinters the vision of wholeness which still gives savor to liberal education and focus to the tasks of the academic man as teacher, scholar, and college officer.

ARTHUR J. DIBDEN
Knox College

Readers are invited to submit contributions to the Round Table and to suggest topics for future issues. Manuscripts should not exceed one thousand words.

OCTOBER, 1961 (Deadline, July 15)

How Much Student "Life"?

Are the non-academic activities of students receiving more administrative attention than they need or deserve?

Has the elaboration of both academic and non-academic counseling proved to be worth its cost either in dollars or in energy expended?

Is the pressure for increased counseling partly due to the recruitment of students from families that do not prepare them for college responsibilities?

Do extra-curricular activities endanger scholastic success?

NOVEMBER, 1961 (Deadline, August 15)

What Is the Place of the Community College among Higher Educational Institutions?

DECEMBER, 1961 (Deadline, September 15)

Would Another Administrative Pattern Suit Colleges and Universities Better than That of the Business Corporation Which They Now Follow?

Editorial

The Life of the Professor

To those of academic preoccupation who are also in mid-career or later, it is a matter of deep personal concern that there be an ample number of able and understanding young people to carry forward the growing tasks of higher education in America and the world. In the face of this need, it is simultaneously almost inevitable that a social institution which has expanded with the relative rapidity of higher education will not be intimately and accurately understood. America has offered unparalleled opportunities for personal achievement for more than three centuries, and it would be surprising if the colleges and universities of the country should not be valued by many persons in proportion to their supposed contribution to personal ambitions. Conversely, the same point of view yields a picture of the professor as a preoccupied but kindly individual who remained within the academic environment because he was not quite equal to facing the rigors of life in the "outside" world.

There is just enough truth in this vision to make it difficult to dislodge. Yet higher education will suffer immeasurably if it is able to recruit for faculty replacement and enlargement only those who are uncommonly timid or plainly lazy. The damage would be equally great or greater, on the other hand, if the aggressive mores of business or professional competition should be carried into academic life. If such a spirit should become predominant, scholarly integrity would be in danger of being smothered beneath a flood of superficial activity whose chief value would be that others of like mind would accord it the status symbols of academic success. There is just enough of this kind of rushing about already in evidence to justify grave fears that it cannot, even now, be turned into sounder channels. College and university campuses should be neither retreats for the indolent nor staging bases for the forays of the ambitious but uncomprehending "robber baron" types, transferred from the earlier history of American business enterprise.

The present balance of intellectual forces is precarious but not hopeless. The greatest danger lies in the necessity of expanding faculties at a period in which the role of the professor has not been clearly delineated within academic circles, much less among students and the general public from whom the new professoriate must be secured. If this judgment is sound, the first corrective step should lie in clarification of the various

facets of the professor's life and work as they are viewed by those in the academic community itself. If this can be achieved, the further task can be undertaken of extending the concept of the professor and his role to the general public, and particularly to undergraduate and graduate students, who are the immediate prospects for recruitment. The undertaking is a large one, but it badly needs concerted effort, and soon. As a small beginning, the following thoughts may be worthy of consideration.

The life of the professor is indeed an extraordinary one in contemporary society. It should be, unless and until society as an aggregate can be brought to duplicate for itself the life of the professor. The present danger is that integration will be achieved by adjustment in the reverse direction. For the life of the professor is the life of the mind. His proper activity is the endeavor to persuade all and sundry to follow in his steps. Busywork there must be, for all must live. And it is honorable work. It need not and must not be at the cost of the life of the mind. Rather, the social justification for the unique life of the professor is the opportunity he has to develop and demonstrate within his own academic community the role which mind is capable of playing in the world at large in giving both direction and meaning to the activities that constitute life. The first order of business in the academic community is to ensure that all who remain within it or are recruited to it should have this kind of elemental understanding of the life of the professor. Then it can be understood that the professor is not timid or lazy but merely insistent upon the conditions which careful observation and contemplation require. He is not withdrawn from society except as society is withdrawn from him because of its unwillingness to pay equal devotion to the life of the mind. The concrete work of the professor is to bring the society to his ways and to maintain continuous guard that the reverse adjustment is inhibited.

The exact content of the professor's life as the life of the mind can never be specified. All that can be said is that whenever in man's past there is evidence that he has coupled his powers of careful observation with even moderately consistent reflection, no barrier to the continuation of human life has proved to be insurmountable. This statement holds true to the present moment. It does not assert that the capacities of the mind are infinite; only that no absolute limits have yet been encountered. Within the wide ranges of observation open to us, what understandings reflective minds may yield cannot be known. The uniqueness of the life of the professor is that it is a life of enquiry directed toward discovery of those paths of action which will enable man to avoid future barriers to further action. The professor must perform this task, for there is no other dedicated solely to humanity who is able to do so. Many have done so in man's past, but only by power over either the bodies or the minds of men, or both. The academic community is the nearest approach our society has been able to make toward creation of an instrument for purely intellectual determination of social directions. The life of the

professor, at its highest level and properly understood, is at the focus of this greatest of all social efforts.

Is this idealized and perhaps esoteric view of the professor so "otherworldly" as to have inadequate appeal to prospective scholars in their years of less than full intellectual maturity? There is no evidence that it is, when either undergraduate or graduate students are helped to clarify alternatives in their own minds. If the academic community fails to recruit enough properly qualified young people to staff our colleges and universities, it will be because of the inadequacies of the academic recruiters, not because of the supply of able and idealistic young people. The raw material for the profession of scholarship exists in ample supply; if the supply is not tapped, the fault does not lie with the oncoming generation. This is stated from long experience, not from ignorance, nor as an irresponsible generalization.

Of course, the physical and pecuniary elements of the life of the professor require attention, which they are receiving. If developments along these lines continue as they may be expected to do, these factors will not be primary in the task of expanding and improving faculties. Too great emphasis on these aspects of the problem of academic recruitment in itself reflects a failure of proper understanding of the life of the professor. The best way to sustain and extend the use of the mind in the conduct of human affairs is for professors themselves to clarify their own thinking about the essential attributes of their calling, and then to exhibit these attributes in their contacts with students day by day. At its highest level, the life of the professor, when seen clearly, is its own best assurance of its continuance and extension.

R.D.P.

The Reporter

A NEW advanced fellowship program in international reporting will be established at Columbia University in September, 1961. It is designed for college graduates with good academic records and substantial professional experience who are interested in careers in reporting and interpreting international affairs. The fellows will study in Columbia's School of International Affairs, one or more of Columbia's area institutes (East Asian, European, Near and Middle Eastern, Russian), the Program on East Central Europe, the Graduate Faculties, or other appropriate divisions of the university. Their studies will stress the history, culture, economics, and political development of a nation or area. Fellows will also work under the faculty of the journalism department and a panel of foreign editors to improve their reporting and writing techniques. In addition to regular course work, they will have conferences with leading foreign correspondents and editors, diplomats, economists, scientists, and other international figures. The program is supported by a grant from the Ford Foundation.

CHANGES in the teaching of introductory physics are being made at Cornell University that will stress atomic and space-age innovations and the humanistic aspects and cultural impact of the science. The first-year course for students who do not intend to major in science will be drastically revised to include topics formerly considered too advanced for introductory courses—electron clouds, quantum theory of chemical binding, Fermi energy, Einstein's theory of relativity, nuclear structure, cosmology, and conservation of parity.

THE nation's first measurement-science center has opened at George Washington University. It was organized by the university's school of engineering in co-operation with the National Bureau of Standards and with the assistance of the Martin Company of Baltimore. The center will offer eight courses in metrology. The program has been established because the need for precise measurement in industry and technology has outdistanced the instrumentation and skills now available, and new techniques and equipment must be developed. Students enrolled in the curriculum in measurement science can work toward engineering certificates or the degrees of Bachelor, Master, and Doctor of Science.

ACCORDING to statistics published in the *Journal of the American Medical Association* and summarized in *Higher Education in the West*, a publication of the Western Interstate Commission for Higher Education, only three of thirteen Western states reached the national average in the number of students entering medical schools during the 1959–60 academic year. In the nation as a whole, 4.7 students per 100,000 population began their medical training. In Colorado, the per-

centage was 5.2; in Utah, 6.2; in Wyoming, 4.8. The other Western states included in the Commission's summary were Alaska, Arizona, California, Hawaii, Idaho, Montana, Nevada, New Mexico, Oregon, Washington, and Wyoming.

AFTER a two-year study, the University of Rochester has announced that a major revision of the undergraduate curriculum will go into effect next fall. The aim of the new plan is to broaden students' opportunities for independent work and to permit greater "study in depth" than is now possible. Students enrolled in the Bachelor of Arts programs will take four courses each semester instead of five. Most courses will meet for three periods each week and "will include the equivalent of a fourth weekly period made up of enriched independent study." Each department made an intensive examination of its own curriculum and eliminated, added, and reorganized courses. The result has been to strengthen the entire academic program. The new curriculum structure is also expected to simplify the University's method of computing undergraduate-degree requirements.

A SERIES of new graduate programs to begin next September at Saint Louis University is designed to help meet Latin America's need for university teachers and to promote co-operation and understanding between the peoples of the United States and Latin America. Regular programs leading to the Ph.D. degree in economics, education, English, history, philosophy, political science, and sociology, with a minor in Latin-American studies, will be offered. Students will be required to have a speaking knowledge of Spanish or Portuguese instead of, or in addition to, meeting the regular Ph.D. language requirements. While completing degree requirements or after receiving the doctorate, they will be placed in Latin-American universities as teachers or researchers in the areas of social science and the humanities.

CLOSED-CIRCUIT television was used experimentally in the spring-quarter orientation of new students at the University of Michigan. The segments of the program presented on television were an information session on the use of speech-department facilities and a student-panel discussion of university rules and regulations.

AMONG the accomplishments mentioned in the Cooper Union's 101st annual report, *A Year of Progress*, are the establishment of new degree curriculums in art and architecture, the construction of a new engineering building, and the presentation of a centennial program of information and special events.

A NEW college will open in September at Laurinburg, North Carolina. St. Andrews Presbyterian College will enroll seven hundred to eight hundred students, will have a staff of forty to fifty teachers, and will have ten buildings, now under construction. The new college will replace three small institutions. The core of the curriculum, a program entitled Christianity and Culture, will be an integrated course in history and religion, supplemented by courses in philosophy, literature, and the arts.

A COMMITTEE of faculty members from Amherst, Mount Holyoke, and Smith colleges and the University of Massachusetts has reported that most college students prefer to do their library reading and their study in small rooms, and that college administrators and architects should take this into consideration in designing or

improving space arrangements for their undergraduates. The findings were based on a survey of 356 students at the four colleges who kept a record of over 8,000 hours of studying and were questioned intensively about their likes and dislikes in study facilities. The committee operated under a grant from the Fund for the Advancement of Education. It found that the development of new devices such as microfilm, language laboratories, and individualized-instruction machines will require greater use of small study and work spaces and less use of the large reading rooms. The more colleges seek to develop independence in students and to demand individual research of them, the more need there will be for carrels or other small study spaces.

THE Institute for Continuing Legal Education, jointly established a year ago by the State Bar of Michigan and the law schools of the University of Michigan and Wayne State University, carries on one of the country's largest programs. The self-supporting Institute offers seminars, medico-legal courses, and other post-degree programs; has prepared six book-length publications; and plans, by next fall, to offer courses in twenty to twenty-five Michigan communities.

THE Graduate School of Education at the University of Chicago has announced changes in its nine-week summer program for 1961. A reduction of more than 30 per cent of the tuition fee will be given to practicing teachers, students currently enrolled in the department of education, and those with contracts for teaching positions in 1961–62. In addition, a flexible time schedule will permit completion of a program in three, six, or nine weeks. Also, there will be a great expansion of curricular offerings—fifty-nine courses, a lecture series on recent developments in education, and a workshop in programed instruction.

The Doctor of Education Program

The aim of a recent study of the Doctor of Education program at Wayne State University was to discover the extent to which it had achieved the original goals set for it, from the point of view of the institution and also of the recipients of the degree. In general, the program appears to have been successful. However, it fell far short of achieving one goal: ". . . to broaden the student's appreciation and understanding of the human scene." Only 22 per cent of the courses taken by the first 135 students awarded the degree were outside the Department of Education, and more than one-third of this work was taken prior to the authorization of the doctoral program in 1946–47.

All those who received the Ed.D. degree expressed satisfaction with their relations with fellow students and faculty. Forty-one tape-recorded interviews with faculty members, however, indicated that they were not entirely satisfied with the operation of the criteria which were used for admission and retention of students in the program. They were concerned about the candidates' deficiency in communication skills, the superficiality of their motives for wanting the Ed.D. degree, and the inadequate assessment of their previous professional work. Attempts to evaluate the quality of dissertations yielded inconclusive results.

CLAIRE IRWIN
Wayne State University

EDITOR'S NOTE: Readers are invited to submit items not exceeding two hundred words in length for "The Reporter." Those which are of general interest will be published with a caption and signature. They should deal with significant ideas, events, or experiences.

Reviews

LANGUAGE TEACHING TODAY: REPORT OF THE LANGUAGE LABORATORY CONFERENCE HELD AT INDIANA UNIVERSITY, JANUARY 22–23, 1960, *edited by Felix J. Oinas*. Bloomington, Indiana: Indiana University Research Center in Anthropology, Folklore, and Linguistics, 1960 (Part II of the *International Journal of American Linguistics*, Vol. XXVI, No. 4, 1960). xii+221 pp. $4.00.

This is a collection of papers given at the Language Laboratory Conference by a group of teachers interested in the problems of laboratory equipment and materials and the uses to which they are put. The introductory chapters indicate the obvious growth of language programs and the advent of the language laboratory as a teaching aid. In the main part of the *Journal*, equipment is discussed by William Locke. He calls special attention to the criteria for equipment (reliability, simplicity, and high-quality sound reproduction) and supports the idea that recording is an essential part of the student position.

Fernand Marty deals with laboratory teaching techniques, calling attention to the fact that the grammar of a spoken language differs from the written grammar, and that laboratory drills must be based upon the oral grammar.

Perhaps the most useful article is Pierre Delattre's presentation of aural-oral testing and teaching drills. The clarity, logic, and practical applicability of his methods make them particularly desirable.

The third main section of the *Journal* is given over to first-hand accounts of high-school teachers who were faced with the problem of setting up laboratories and purchasing equipment. Although these are not of serious consequence, they will be useful to teachers about to embark on the laboratory problem.

For science-fiction addicts, a long article by F. Rand Morton, entitled "The Language Laboratory as a Teaching Machine," will furnish some good entertainment, once the esoteric linguistic jargon is passed. The fantastic gadgetry of the teaching machine he envisages is certainly beyond the scope of realistic budgets, but if he can get it, I am all for it. Dialing the lesson and having automation all the way is fine; the tapes he has in mind are not different from those in current use, except that the beginning of the "testing phase" (as distinct from the "teaching phase") is signaled on tape by a bell. The linguistic devices he outlines are sound and worth examining.

The visual-aid section, consisting of two short articles, contains no new information. The usefulness—and unavailability—of closely correlated visual aids is reiterated.

Some cogent commentaries are provided as an adjunct to each paper in this volume. In general, a person entirely unacquainted with the language laboratory will find some valuable information here; and the person already working in the field will find excellent material (such as Mr. Delattre's) at the other end of the

spectrum. In so new an endeavor as the effective use of the language laboratory as part of the total technique, the amassing of the impressions and advice found in the articles in the *Journal* is necessary. I would only suggest that in future conferences some of the more obvious material be omitted and the time thus saved used by the participants for less theory and more practice. It is true that there are absolute novices among the participants at some such conferences, but it is hard to believe that language-laboratory conferences must continue to reiterate *ad infinitum* the elementary facts of the background of laboratories, the government's interest in the matter, and the diversity of equipment. All this information is published and available, and no special meeting is needed to circulate it. The equipment problem is, of course, an urgent one; in my opinion, several manufacturers are putting grossly inferior equipment on the market on a large scale, and such investigators as Mr. Locke are doing a great service to the profession by their examination and pioneering of materials. However, the language-teaching profession needs protection and safeguards against inferior laboratory equipment. Could not a conference investigate and report on manufacturers and their products by name?

This issue of the *Journal* contains basic as well as advanced theoretical and practical information; as such, it should join the library of important documents on the language laboratory.

EDWARD M. STACK
Villanova University

PLAIN TALK FROM A CAMPUS, *by John A. Perkins.* Newark, Delaware: University of Delaware Press, 1959. vii+195 pp. $4.00.

The reflections of college and university presidents are finding their way into books in increasing number. Who reads them, besides other presidents, has not yet been sufficiently investigated. Maybe that is just as well.

Among such recent books are those by Harold W. Stoke, Henry M. Wriston, James L. Morrill, and, unfortunately, less known in this country, *If The Gown Fits*, by A. P. Rowe. More are in the typewriters, and still others, no doubt, forming in reflective minds. For a profession which has been neither self-conscious nor self-analytical, this is a wholesome sign. Higher education may be better served if a presidential career as such—a classified position with job specifications—never develops, but the philosophy and practice can be improved both for the profession and for particular men.

President John A. Perkins of the University of Delaware has fittingly entitled his book *Plain Talk from a Campus*. He thinks the time has come for that, and he is right. He does not, therefore, side-step the questions of federal aid, more taxes, school-district reorganization, fraternities, and intercollegiate athletics, or such sacred academic cows as small classes and uninhibited curriculums. There are vigorous thoughts on these questions and many others, presented in clear, unadorned, right-to-the-point language.

The book is less personal than Henry Wriston's and less philosophical and systematic than Harold Stoke's. While tough-minded and realistic, it has none of the bitterness of the Australian volume by A. P. Rowe. In fact, it is hardheadedly optimistic. Perhaps this itself is significant after the author's service as a state budget director, an Undersecretary of the Department of Health, Education, and Welfare, and a university president for ten years (he is now the president of the American Associa-

tion of Land-Grant Colleges and State Universities).

John Perkins is convinced that our fright by the Soviet Union must be turned into many years of "great educational and civic deeds"—participation in politics by educated people, sacrifices in more taxes and gifts, reorganization of preparatory schooling, improvement in the university, and a general settling down to business in dead earnest. Our special needs are a rededication to universal public education "as the essential tool of progress"; a return to the university as a place of intellect, books, scholarship, and cultural opportunity; and the revitalization of democracy by the public service and social consciousness of all men in the Greek tradition.

The book is a brief collection of speeches and papers chosen from the verbal outpourings required of a university president. The emphasis is primarily on public higher education. The chief topics of the four parts are problems of high school and college, adequate finance, public service and higher education, and the future. Some of the best essays are on the urgent problem of how to finance what is now Operation Shoestring, which should become Operation Schoolboy, "to mount an educational program commensurate with our national security" (page 50). It will take more money—more than the states are likely to supply with their shortcomings in taxation and patterns of expenditure. "You can't buy brains at the bargain counter without risking quality" (page 28). We have a long and successful history of federal aid for state activities which are critical to our national well-being. Education qualifies too. We need, therefore, according to the author, federal aid to achieve minimum standards commensurate with national wealth and national requirements. On the fear of control, two points: let's make sure this is not a "mere excuse to avoid taxes" and "why be afraid of ourselves?" (pages 34, 58).

The book contains much thoughtful reflection for the interested reader and sound advice, although not so intended, for the academic practitioner. It suffers from its origin in addresses and reports. Some duplication, some disjointedness, and some special-audience orientation creep in, along with more local experiences near the end than seem necessary for the illustration of general points. If, as Perkins says, "courage is a by-product of intellectual honesty" (page 138), the compliment the author most deserves is that this is a courageous book.

ELDON L. JOHNSON
University of New Hampshire

HIGHER EDUCATION: THE YEAR BOOK OF EDUCATION, 1959, *edited by George Z. F. Bereday and Joseph A. Lauwerys*. Yonkers-on-Hudson, New York: World Book Company, 1959. xiii+526 pp. $8.50.

The *Year Book* for 1959 is devoted to higher education. In their Introduction, the Chairmen state that four major questions emerge from the contributions received: (1) To what extent in our increasingly complex societies can the universities continue to fulfill their traditional role of educating leaders for all the professions? Is it asking too much to expect them to train the scientists and technologists of the future? Or should we delegate part of this responsibility to separate institutions, such as the colleges of advanced technology in Britain? (2) What at present is the ideal balance between liberal and professional studies in higher education? Should we, spurred by recent Russian achievements, pay more attention to technology? Or would such a policy be detrimental in the long run to both pure science and education

itself? (3) What proportion of the population should receive professional education? How can we guarantee that university graduates are educated broadly enough to lead not only the professions but also society as a whole? (4) If higher education were made available to all those who desire it and could benefit from it, how would existing courses of study be affected, as well as standards of attainment? Could we supply enough teachers to meet the increased demand? How would such an expansion be financed?

In the Editors' Introduction, George Z. F. Bereday, Brian Holmes, and Joseph A. Lauwerys discuss two ideals in particular: academic freedom and social responsibility. European universities have been (and largely still are) able to preserve their academic freedom because they educated the leaders of all the major professions within society—its lawyers, doctors, priests, and others, who, in turn, constituted a strong cadre in defense of academic freedom and social responsibility as the universities themselves defined it. Today society asks for proportionately fewer lawyers and priests, but it is in dire need of educators, managers, scientists, and technologists. How have the universities responded? On the Continent during the nineteenth century, the established universities refused to admit technological studies into their curriculums. As a result, European administrators continued to be educated largely in traditional subjects. It is now recognized that such a policy is no longer practicable. The question arises whether European universities have really tried to adapt themselves to new conditions or whether they are still content to make piecemeal adjustments and hope for the best.

In the United States, the problem is different. Here the state universities of the nineteenth century were created with the express intention of furthering agricultural and industrial progress. As a matter of course they embraced a considerable variety of technological and professional studies. (Contrast the attention paid to business administration, for example, on the one side of the Atlantic with that on the other.) However, every coin has two sides, and the obverse of this one, say the editors, is that the very sensitivity of the American state universities to "consumer demand" has caused a loss of autonomy and academic freedom (judged, that is, by European standards). The following factors, among others, have conditioned American university behavior: (1) Student admissions are regulated by the state authorities rather than by the universities themselves. (2) Professional studies have so proliferated that standards attained in general studies have declined. (3) Professional solidarity among university teachers has weakened as a result of the variety of institutions now offering higher education. (4) Control by the state rather than the federal government subjects the universities to a precarious balance of political power. (5) There is no permanent civil service at either state or federal level which would be able to protect higher education against the vagaries of political or administrative changes.

The separate topics of this Introduction are treated admirably, and the text is richly impregnated with gems of insight. Unfortunately, the authors end on a trumpet voluntary that sounds more like the optimism of an evangelistic revival than a logical conclusion derived from the various themes in the essay.

Section I presents a series of case studies by a stellar cast of authors, showing how universities in different parts of the world have modified their traditions in the light of changing historical conditions. Richard Meister outlines the evolution of universities

in Austria. Nicholas Hans describes the response of European universities generally to the nineteenth century's demand for technologists. He points out that, whereas on the Continent separate technological institutions were created outside the universities, in England the new civic universities, led by London, admitted science and technology from the very outset. The history of these universities is expertly traced by W. H. G. Armytage.

Turning to the present day, F. A. Vick, in a stimulating article, defends the policy of the newly created University of North Staffordshire, which seeks to bridge the ever widening gap between liberal and scientific education. I. L. Kandel traces the growth of the American state universities, stressing their attempt to combine respect for knowledge per se with a greater adaptability to contemporary needs. One of the most powerful contributions in the book is Robert Ulich's essay "The Contemporary Academic Scene in the United States." Contrasting the high prestige and security of the European professor as opposed to the position of his American colleague, and the independence of the European undergraduate as compared with the strict regimen imposed on the American student, Ulich gently chides American institutions for their adherence to the grade system and calls for a greater freedom for both teacher and student. John S. Brubacher compares the lack of interest shown by American students in general subjects with the keenness they display for more narrowly professional studies. Relying upon a philosophy of instrumentalism, he suggests that teachers of the former should seek to arouse enthusiasm by using two different approaches: (1) For a few students, it is enough to point out that general studies are an end in themselves. (2) The rest should be encouraged to regard them as a means toward achieving a certain desirable kind of life or career. Other articles discuss such matters as the conflict in Latin-American universities between European and American academic traditions and the influence of communism on higher education in Yugoslavia.

Section II considers the place of professional studies in higher education and the responses made by different nations to their need for more professionally trained personnel. On the Continent, teacher-training colleges emphasize the importance of subject-matter, whereas English colleges pay more attention to professional education. Only in the United States is it possible to take a B. A. in education. In the field of managerial and technological education, the French early created a number of technological institutions, which later received the status of universities, while in Germany separate universities were immediately set up to give commercial and technological training. In Britain, where technological studies were immediately accepted within civic universities, the latest policy is to create separate technological institutions. In the United States, professional courses have always been offered by the state universities. At present, they are more popular as subjects than liberal studies.

Section III is entitled "Problems of Control, Finance, and Organization." It includes articles on Italy and Lebanon (the last a particularly comprehensive essay by George D. Shahla) but concentrates on the United States and Britain. Here the leading contributions are those of R. Freeman Butts and Sir Charles Morris. Butts points out that the responsibility of the university to the public welfare has always been more clearly recognized in the United States than in Europe. The American electorate has a considerable voice in the policies adopted by the state universities,

exemplified by the fact that university regents are usually appointed by the state legislatures, or elected by the people, and the universities themselves are financed at the state rather than the federal level.

Contrast this with the situation in Britain, where the University Grants Committee, which finances the universities, is removed from direct popular influence and has in theory no control over how university grants are spent. According to Sir Charles, the predominant influence of Oxford and Cambridge on academic life in Britain has established the tradition that academic self-government should never be abrogated. Willis Dixon examines the status of teacher-training colleges in Great Britain, while John Vaizey and Thad L. Hungate discuss in some detail the financing of higher education in Britain and the United States respectively.

Section IV consists of case-studies on the knotty problem of academic freedom. H. Gordon Hullfish discusses, among other issues, two of the most recent inroads, namely McCarthyism and segregation. David Riesman makes a distinctive contribution in "The Influence of Student Culture and Faculty Values in the American College." Arguing that the comparative absence of idealistic or ideological fervor among postwar American students reflects the conservatism of the nation as a whole, he nevertheless maintains that these young people are in their quiet way more thoughtful and more balanced than their predecessors between wars. Other articles examine academic freedom in the Argentine before and after Perón, in South Africa with its principle of apartheid, in Makerere College in East Africa, and in the University of Tasmania, where a philosophy professor was dismissed for alleged misconduct.

Section V discusses the relation of secondary to higher education in Denmark, Western Germany, India, and New Zealand. C. Arnold Anderson analyzes the social background of undergraduates during the nineteenth century at Oxford, Cambridge, Halle, Harvard, and certain Russian universities. Ralph R. Fields writes enthusiastically of the American community college.

In sum, the 1959 *Year Book* is a valuable survey of the pattern of higher education in various countries, and in particular of the common problems which universities are having to face at the present time. It is unfortunate, in view of the great interest now taken in Russian education, that only one contribution was received from a Communist source, namely the article on Yugoslavia by Josip Lukatela. Nevertheless, the editors have mustered an impressive list of contributors and nicely balanced theoretical essays with case-studies. They have produced a highly desirable sequel to the edition on secondary education published in 1958.

GEORGE F. KNELLER
University of California, Los Angeles

POLICIES AND PRACTICES IN HIGHER EDUCATION, *by Algo D. Henderson.* New York: Harper and Brothers, 1960. xiv+338 pp. $5.75.

In this volume, the writer undertook to produce "a comprehensive analysis of higher education made by an individual." That individual is, however, one who, as teacher, administrator, researcher, and writer on the problems of higher education, is unusually well qualified to make such an analysis. Mr. Henderson makes frequent use of the first person to indicate the expression of personal views, and thereby occasionally gives an almost conversational note to a book that reads well and easily. Minimal footnoting and

the use of paraphrasing rathan than direct quotation help to achieve these qualities. The volume is scholarly, but not in the pedantic sense of that word.

There are occasional statements which are misleading or not altogether accurate. For example, on page 255, the assertion that the Michigan State University of Agriculture and Applied Science was started ten years before the Act of 1862 was passed suggests a founding date three years earlier than the actual one of 1855. On page 120, Mr. Henderson accepts the common view that ". . . the general-education movement is relatively new." As Cowley has demonstrated, the phrase "general education" was used by Eliot at Harvard, and Milton wrote of "general studies." Furthermore, many of the concerns which gave rise around 1930 to a movement designated as general education have been present in earlier programs for educational change. Again, in speaking of the use of achievement tests which "will permit some students to move on to more advanced courses," the author suggests that these same tests will also serve to "reveal the needs of other students who should take make-up work" (page 109). Actually, a test of reasonable length and of sufficiently wide range to serve both purposes is not often feasible. These defects are minor matters, but they do emphasize that Mr. Henderson is at his best (which is very good indeed) in painting the broad picture rather than the detailed one. This clearly was his intent.

On the whole, he takes an integrative, inclusive, or a constructively compromise view on controversial issues. Thus repeatedly he emphasizes the necessity for examination of world rather than solely Western cultures and the desirability of interweaving vocational and general education. He wisely points out in the discussion of the fragmented curriculum that the real issue lies in the quality of the education received by individuals, and hence in the restriction of the offerings of a college faculty to areas justified by its special competencies. In a chapter on the controversial issue of whether college teaching is good, bad, or indifferent, he starts from the incontrovertible thesis that "college teaching deserves to be improved" (page 176). At another point, in speaking of the need for "imaginative actions" in programs for students of high ability, he suggests that "a wise faculty will permit instructors to give occasional extra credit for extra work done" (page 109). A sensible suggestion, indeed, but one offering a criterion by which relatively few faculties will be found to be wise! He also takes an unequivocal stand that secret societies are undesirable in higher education.

Among the other topics or questions to which Mr. Henderson addresses himself are mass-education problems, intellectual freedom, staffing, administration, financing, and, in a final thoughtful chapter, the strengths and weaknesses of higher education. On all of these topics, his analyses are penetrating and his views clearly expressed. Eight pages of selected bibliography offer opportunity for further exploration of the various topics treated.

Mr. Henderson indicates that his book is "intended primarily for students at the graduate level who are preparing for college teaching or college and university administration" (page xi). Certainly the volume will be excellent for this purpose, but it will also make interesting and educational reading for anyone concerned with trends and critical issues in higher education today. The development of most colleges would be significantly redirected if all faculty members were to read it thoughtfully.

PAUL L. DRESSEL
Michigan State University

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